

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

NK 1312 Aug. 83

METEOROLOGICAL DATA REPORT

19316B MLRS Missile Number FV3-21, FV3-10, FV3-22 Round Number 500/AT2-52, 501/AT2-53, 502/AT2-54 5 August 1983

ђy

DONALD C. KELLER Program Support Coordinator Phone Number (505) 679-9568 AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

UNITED STATES ARMY ELECTRONICS COMMAND

83 00 00 01 0

NSTRUCTIONS UNITED CO.

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

REPORT DOCUMENTATION	PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER		3. RECIPIENT'S CATALOG NUMBER
DR1315	AD-A132419	
4. TITLE (and Substitle) 19316B MLRS Missile Number FV3-21, FV3-10, FV		5. TYPE OF REPORT & PERIOD COVERED
Round Number 500/AT2-52, 501/AT2-	-53, 502/AT2-54	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(e)		8. CONTRACT OR GRANT NUMBER(*)
White Sands Meteorological Team		DA Task 1F665702D127-02
9. PERFORMING ORGANIZATION NAME AND ADDRESS	3	10. PROGRAM ÉLEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Dev	elopment Cmd	12. REPORT DATE Aug 83
Atmospheric Sciences Laboratory White Sands Missile Range, New Mex		13. NUMBER OF PAGES 30
14. MONITORING AGENCY NAME & ADDRESS(II ditterm US Army Electronics Research and D		15. SECURITY CLASS. (of this report)
Adelphi, MD 20783	everopment cmd	UNCLASSIFIED 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		L.,
17. DISTRIBUTION STATEMENT (of the abetract entered	in Block 20, if different fro	m Report)
Approved for public release; distr	ibution unlimited	l .
18. SUPPLEMENTARY NOTES	, <u></u>	
19. KEY WORDS (Continue on reverse side if necessary a	nd identify by block number)	
Meteorological data gathered for t Number FV3-21, FV3-10, and FV3-22 502/AT2-54 are presented in tabul	he launching of t , Round Number500	

CONTENTS	AGE
INTRODUCTION	1
DISCUSSION	1
GENERAL AREA MAP	2
LAUNCH AREA DIAGRAM	3
TABLES	
1. Surface Observation Taken at 1245 MDT at Brillo	4
2. Anemometer Measured Wind Data at 30 FT. AGL	5
3. Anemometer Measured Wind Data at 60 FT. AGL	6
4. Anemometer Measured Wind Data at 90 FT. AGL	7
5. Launch and Impact Area Pilot-Balloon Measured Wind Data	3
6. Aiming and T-Time Computer Met Messages	ģ
7. E-28 Significant Level Data at 0845 MDT	10
8. E28 Upper Air Data at 0845 MDT	12
9. E-28 Mandatory Levels at 0845 MDT	16
10. Jallen Siginificant Level Data at 0945 MDT	17
11. Jallen Upper Air Data at 0945 MDT	18
12. Jallen Mandatory Levels at 0945 MDT	22
13. E-28 Significant Level Data at 1245 MDT	23
14. E-28 Upper Air Data at 1245 MDT	24
15. E-28 Mandatory Levels at 1245 MDT	27



INTRODUCTION

19316B MLRS, Missile Numbers FV3-21, FV3-10 and FV3-22, Round Numbers 500/AT2-52 501/AT2-53 and 502/AT2-54, were launched from Brillo, White Sands Missile Range (WSMR), New Mexico, at 1245:01, 1245:06 and 1245:11 MDT, 5 Aug 83. The scheduled launch times were 1245:00, 1245:04.5 and 1245:09 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

- 1. Observations
 - a. Surface
- (1) Standard surface observations to include pressure, temperature ($^{\circ}$ C), relative humidity, dew point ($^{\circ}$ C), density (gm/m3), wind direction and speed, and cloud cover were made at the Brillo Met Site at T-0 Minutes.
- (2) Anemometer data were provided form existing towermounted anemometers at Brillo. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.
 - b. Upper Air
- (1) Low level wind data were obtained from Pilot-balloon observations at:

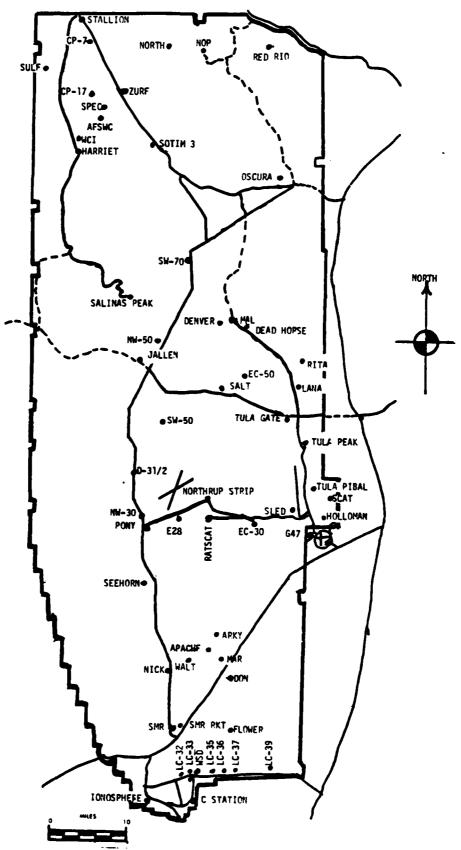
SITE AND ALTITUDE

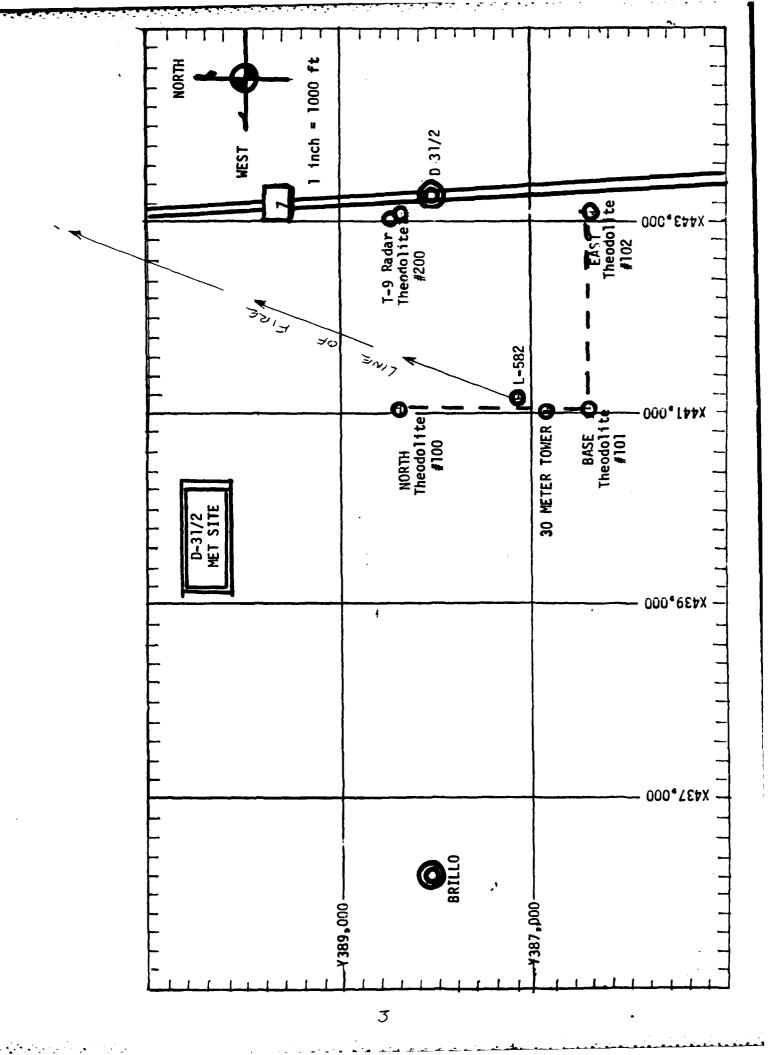
D3½ 1550 Meters MAL 2000 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

E-28 0845 MDT Jallen 0945 MDT E-28 1245 MDT

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1								STATICT Brillo	0		
DATE 05	108 83 14017711 VEAR	83	ł				<i>x</i> :	= 443,093,12	¥ = }	X= 443,093,12 Y= 386,316,94 H= 3962,25	= 3962.25
1112 M D J	1 22	TE:WE	TECHERATURE OF OC	DEW PO	2018T	PELATIVE HUMIDITY %	DEHS1]Y gm/m³	MIND DIRECTION SPEED C degs In kts	WIND SPEED kts	HARACTE kts	R VISIBIL-
1245	884.5		35.0		13,3	27		080	90		50
			-					4			

					CLOLIDS					
08STRUCT 102S	15	t LAYE	1	2ng	1 LAYE	ا م	1 3rc	d LAYE	o.	RE !! A RKS
TO VISIBILITY	AMT TYPE HGT	TYPE	}	AM TYP	TYPE	TYPE HGT	A::1	A:T TYPE HGT	HGT	
		יוו	6500							
	•	3	2000							
		_		_			_			

PSYCHROMETRIC COMPUTATION

712 UTA 110M	2	(Ġ	3		
ر د	1245	35.0	20.2	14.8	13,3	27
PSYCHROPETRIC COMPUTATION	MDT	ORY BULB TEP.P.	WET BULB TEMP.	WET BULB DEPR.	INT	RELATIVE HUMID.
	T111E:	ORY BU	WET BU	WET BU	DEW POINT	RELATI

Anemometer Data - 30 FT. Level of 30 Meter Tower X= 441,018.71 Y= 386,849.19 H= 4,004.80 (BASE)

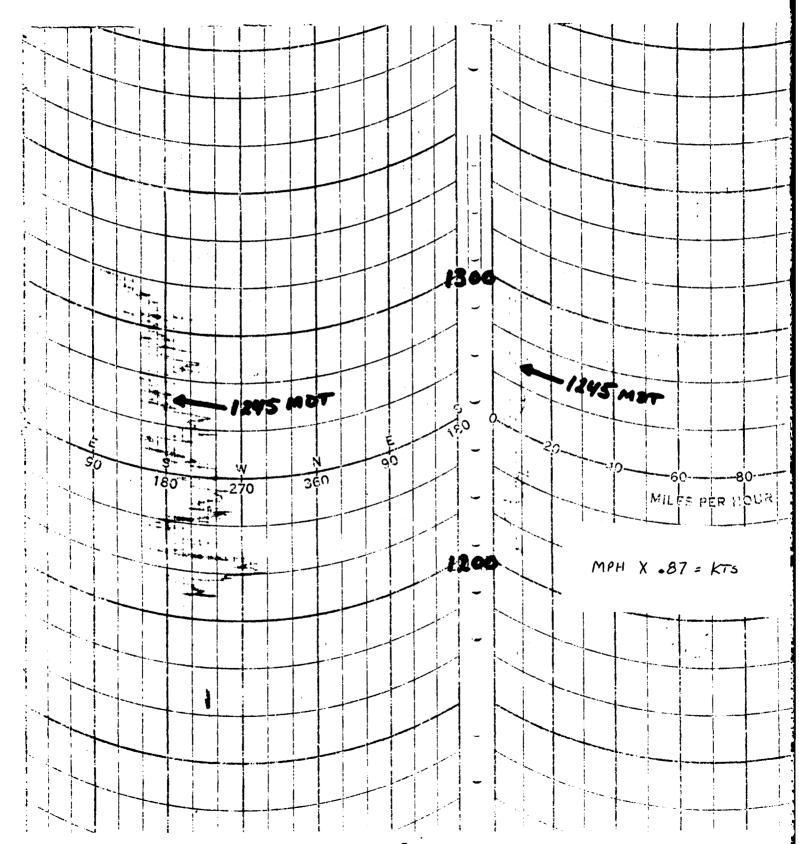


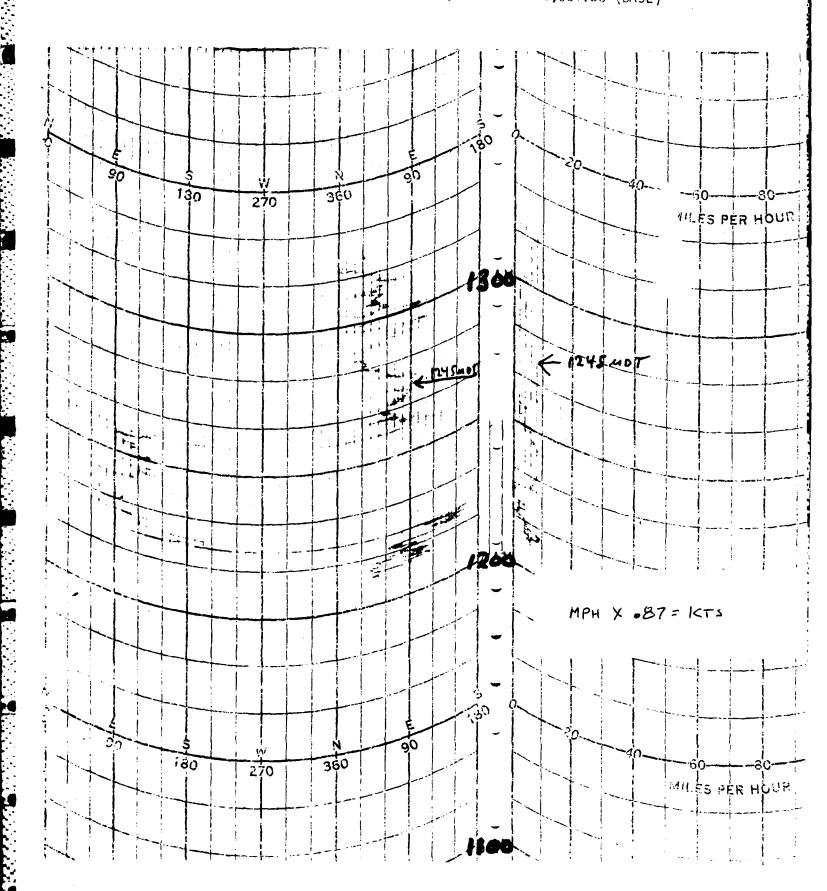
TABLE . 3

Anemometer Data = 60 FT. Level of 30 Meter Tower X= 441,018.71 Y= 386,849.19 H= 4,004.80 (DASE)

DATA MISSING

Anemometer Data - 90 FT Level of 30 Meter Tower

X = 441,018.71 Y = 306,849.19 H = 4,004.80 (BASE)



T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 5 August 1983

SITE: D312

TIME: 1245 MDT

WSTM COORDINATES:

X = 443,093.12

Y = 386,316.94

H= 3,962.25

SITE: MAL

TIME 1255 MDT

WSTM COORDINATES:

 $\chi = 509,421.05$

 $\gamma = 495,563.18$

H= 4,126.81

LAYER MIDPOINT	DIRECTION	SPEED	LAYER MIDPOINT	DIRECTION	SPEED
METERS AGL	DEGREES	KNOTS	METERS AGL	DEGREES	KNOTS
SURFACE	080	03	SURFACE	180	04
150	147	0 3	150	168	97
210	142	04	210	165	03
270	139	05	270	153	06
330	140	06	330	105	04
390	142	06	390	144	NF
500	147	06	500	161	13
650	146	06	650	163	16
800	130	05	800	162	14
950	123	04	950	160	12
1150	087	10	1150	157	09
1350	089	13	1350	317	07
1550	072	16	1550	302	04
1750	MIS	SG .	1750	276	02
20 00	MIS	SG .	2000	229	02

All data obtained from double theodolite tracked pilot-balloon observations.

AIMING AND T-TIME COMPUTER MET MESSAGES 5 August 1983

E-28 0845	MDT	JALLEN 09	945 MDT	E-28 1245	MDT
METCM1329	065	METCM1332	2065	METCM1329	
051480119	888	051580124	883	051880119	
00196004	30340888	00284003	2065 1883 29980883	00071003	30710888
01327006	29840878	01270006	29920873	01210005	30490878
02305009	29770853	G2309006	29740848	02259004	30060853
03115006	29520815	03358004	29430810	03206004	29700815
04019007	29170769	04039014	29150764	04124011	29310769
05058016	28900725	05073019	28830721	05121012	28910726
06080021	28500683	06095019	28390679	06108013	28490684
07091028	28050643	07102026	27960639	07087016	28040644
08097027	27600605	08106025	27580601	08095018	27670606
09104022	27250568	09125024	27310565	09119023	27460569
10137025	27060534	10141029	27000531	10122017	27100535
11146021	26740501	11146026	26680498	11153020	26750502
12112022	26380455	12136028	26290452	12139029	26340456
13186034	25680399	13146032	25650396	13131035	25700400
141630 3 4	24980349	14160028	24930347	14140029	24970350
15144032	24210304	15153033	24080802	15148033	24160304
16163036	23430263	16166037	23200261	16174037	23420264
17174043	22639227	17159049	22510225	17182044	22670228
18144050	21880195	18155054	21750193	18176058	21910195
19160055	21220167	19167065	21150165	19172045	21250167
20192045	20830142	2 0 189049	20810140	20195038	20900142
21155031	20810120	21138027	20750119	21156027	20550121
22101028	20780102	22113028	20480101	22153039	20640102
23135024	20540087	23152034	20680086		
24139021	21070074	24191024	21330073		
25199026	21250063	25135022	21410062		
26135022	21420054	26139022	21480053		

STATION ALTITUDE 3912-75 FFFT MSE 5 AUG. 83 0845 MDT ASCENSION NO. 45

SIGNIFICANT LEVEL DATA 2170290045 FAST-28/CHERRY TABLE 7

vEODETIC COORDINATES 32.89927 LAT DEG 136.40591 LON DEG

PRESSUME	GFON	7	TEMPERATURE	REL . HIM.
MILLIBARS	ALTITUDE S MSL FEEI	AIR DFGREES	DEWPOINT CENTIUKADE	PERCENT
8.478.8	5	ċ	3	•
Be	9	M	11.3	
	5		-	
75A.7	8377.8	÷	•	45.0
	•	5	•	•
700.0	10618.5	12.4	•	58.0
673.5	11678.5	•	6.5	
624.5	13722.7	†•	-3.0	•
580.7	15653.6	 .7	9.0-	63.0
558.3	16685.0	•		•
542.0	17460.0	-1.9	•	•
500.0	19552.2	-6.1	•	•
481.3	20530.4	-7.8		•
473.3	20959.1	-8.0	•	•
457.8	21809.0	-8.8	•	•
434.9	23109.8	-11.7	-25.0	32.0
419.8	23997.3		•	•
408.0	24708.2	15.	•	•
0°00t	25199.2	-16.6	•	40.0
310.2	26513.4	-19.3	•	36.0
365.6	27404.6	-50.9	•	•
300.0	32111.3	-31.8	-47.1	20.0
266.4	34838.8	38	-53.2	19.0
25p.0	36267.9	-41.6		
213.8	39697.2	9		
200.0	41123.0	-53.2		
167.3	44945.8	3		
150.0	47064.6	-64.2		
1.50.7	49833.7	-65.8		
124.4	50621.4	-		
119.2	51679.1	-63.9		
111.8	52773.7	-64.3		
106.2	54007.1	-65.8		
*	54,254.5	-64 · B		
	55217.3	•		
•	57408.8	-68.4		
81.5	59287.7	-67.7		
ŝ	60740.1	-62.0		
70.0	62375.2	-61.6		
55.5	67140.9	-59.7	•	
			2	

STATION ALTITUDE 3912.75 FEET MSL 5 AUG. 83 0845 MDT ASCENSION NO. 45

SIGNIFICANT LEVEL DATA 2170290045 EAST-28/CHEMRY TABLE 7 CONT'D

GEODETIC COOKDINATES 32.89927 LAT DEG 136.40591 LON DEG

PRESSURE GFOMETRIC TEMPERATUKE REL.HUM. ALTITUDE AIR DEWPOINT PERCENT MILLIBAKS MSL FEET DFGREES CFNTIGKADE

50.0 69313.2 -57.6 44.6 71697.7 -57.6 39.6 74202.7 -53.5

STATION ALITIUDE 3412.75 FEET MSL 5 AUG. 83 ASCENSION NO. 45

UPPER AIM LAFA 2170290045 EAST-28/CHERRY TABLE 8

⁰E0DETIC CO0kDINATES 32.69927 LAT DEG 136.40591 LON DEG

AI MILLI _d ars degr	FE S	DEWPOINT CENTIGRADE	عمد	URIC ER	SUUND KNOTS	CT ES	PEE	ANDEA OF REFRACTION
5 6	6.5	14.9	49.0	1034.7	676.B	110.0	£ . 1	1.000300
2	3.1	: =	47.0	1017.0	672	119.6	4.2	•
·V	2.9	<u>-</u>	47.0	₽•666	672.	127.2	†• †	1.000280
V	2.2	10.3	46.8	984.9		134.1	4.6	•
7	1.2	₽.	46.5	•	670.2	9	4.8	•
2	0.2	₽•R	46.2	957.7	0.699	65.5	9.4	
_	4.5	7.3	45.9	h• h h6	667.8	46.8	0•9	•
18	œ	6•3	45.5	931+3	9.999	31.6	6.2	1.000250
7	7.3	5.3	45.2	916.3	665.3	15.7		1.000245
2	6•3	4.5	45.4	905.2		17.3	10.0	•
2	5.7	4.5	47.3	_		•	13.5	•
7		4.5	49.3	877.2		30.0	15.8	•
=	3.8	4.5	53.2	865.0		35.5	•	•
2	2.7	* * *	57.1	852.9		ブ	18.8	1.000229
=	1.4	4+3	61.6	841.5		43.4	19.9	•
Ξ	0.0	0•4	66.3	830.3		48.3	21.5	٠
ų,	8•7	2.1	66.1	819.1	655.4	49.7	•	1.000218
-	7.5	6•	63.2	806.1		20.0	26.0	•
9	2.9	6•-	60.2	797.2		51.1	26.8	1.000205
T.	5•0	-2.8	57.3	786.4		52.1	27.4	•
~7	3.7	0• 11-	57.0	775.6		53.7	26.9	•
C	2.3	6•1,-	58.8	764.9	_	54.1	26.5	•
_	1.0	-5.7	9•09	754.3		51.8	25.4	
•	٠.3	- 6•6	62.4	743.9		51.9	24.5	•
7	-1.0	-11.0	46.2	732.2	643.3	4.00	23.4	1.000177
7	1.4	-20.3	22.0	720.1		•	23.4	•
7	-1.7	-25.7	13.8	707.5		70.4	54.9	1.000161
7	2.0	-24.9	15.2	9•h69	041.7	74.6	25.5	1.000159
7	3.0	-24.0	17∙8	6.4.1	640.5	77.5	25.5	1.000157
₹	3	-23.3	20.5	673.5	4.669	80.0	23.4	1.000155
ئ.	5.0	-22.8	23.1		638.2	82.5	21.4	1.000153
9	•	-22.5	25.7	652.8		82.0		•
ţ		-22.0	24.7	642.3	0.36.0	80.0	_	1.000149
7	7	-21.6	31.8	632.0		76.0	-	•
3	8•0	-21.2	33.6	620.4		73.7	•	•
ĩ		-23.3	2A.9	609.5	634.0	72.2		.0001
ĩ	•	-24.6	26.9	599.3		•	•	00013
F		P-45-	•	590.1	631.8	78.9	24.9	1.000136
_	1.5	-25.0	31.5	581.0	630.4	82.4	26.0	1.000134

ž	
	-
π.	2
2 • 75 845	
3,312.75 F ET MSL	ٿ ک
	=
STALLON ALTITUDE	•
ALT H3	1 No.
2 6	ASCLNS LULI
A I	22
. 	S

UPPER AIR DATA 2170290045 EAST-2U/CIEURY TABLE 8 CONT'D

GEONETIC COOKDINATES 32.84927 LAT DEG 136.40591 LOH DEG

INDEX OF REFRACTION	1.000152 1.000131		1.000123	•	•		1.000112			1.000104	1.000102	1.000101	1.000099	1.00007	1.000096		1.000092	1.00001	1.000089	1.000088	1.000086	1.00005	1.000083	1.00002		1.0000	1.000078	1.000076	•	1.000074	•	1.00001	1.000070	1 • 00n0c8	1.000067	1.404066
TA SPEEU KNOTS	27.2 28.1	30.1	30.0	29.6	30.4	31.9	33.7	33.8	34.0	34.4	34.9	34.5	33.7	31.7	59.9	30.0	30.0	32.1	34.2	36.4	38.5	40.6	41.8	43.2	43.1	C•Zh	41.8	41.1	-	45.4	3	47.8	•	51.7	52.9	53.1
WIND DATA UIRECTION S DEGREES(IN) K	85.8 89.8	9.96	100°5	2	0.86	95°4	92.7	206	87.8	63.9	δ0 . 3	79.7	79.6	81.0	85.5	85.8	63.1	85.7	68.1	90.7	95.4	95,8	99.3	102.6	102.7	9.101	99.1	94.5	89.1	82.9	78.9	78.1	79.4	83.1	65.2	6°43
SPEFD OF SOUND KNOTS	629·1 627·8	624.7	623.4	650.9	619.7	618.6	617.1	614.3	612.8	611.4	6:609	608.5	607.0	605.6	604.1	602.6	c01.0	599.5	598•0	596.5	595.0	593.6	592.1	7-069	588.8	587.5	585.5	583.9	582.2	580 • 8	579.4	578•1	576.7	575+3	573.9	572.5
DFNSITY S GM/CURIC METER	572.0 563.1 554.8	546.2	537.5	520.4	511.7	•	487.0	479.1	471.3	463.7	456.2	6.844	441.6	434.5	457.4	420.3	413.3	400.5	399.8	393.1	386.3	379.b	373.1	366.7	360.4	2.4CC	340.5	342.3	336.5	330.4	324.3	316.2	312.2	306.3	300.5	9.40Z
KEL HUM. PEPCENT	37.7 45.0 37.9	38.0	39.1 37.6	36.0	28.9	22.9	C 100	25.0	21.7	21.3	21.0	20.7	20.4	20.1	19.9	19.7	14.5	19.3	10.1	16.9**	10.2**	3.6**														
TEMPERATURE R DEWPOINT EES CENTIGRADE	-24.0	-27.1	-27.8	-30.5	-33.6	-36.7	8 · / 6 · ·	-40.1	-41.2	4.24-	-43.5	9-111-	-45.8	6.94-	149.0	-40·1	-50.5	-51.4	-52.5	-54.5	+ 24•4	-68•0														
TEMP AIR DEGREES	-12.6	-16.2	-18.2	-19.3	-50-5	-21.1	-22.3	-24.6	-25.8	-26.9	-28.1	-29.5	-30.4	-31.5	-32.7	-34.0	-35.2	-36.4	-37.6	-38.8	-39.9	-41.0	-45.2	-43.5	L.44-7	CI	-47.3	-48.5	8·6h-	-50.9	-51.9	-55-0	-54.0	-55.1	-56.1	-57.2
PRESSURE MILLIUARS	420.2 419.8	403.2	395.1 587.2	379.4	571.7	364.1	364.2	541.9	534.8	327.8	321.0	314.3	307.8	301.4	295.0	280•6	282.4	270.3	270-4	264.5	250.7	253.0	247.4	241.8	230+3	231.0	225.8	220•7	210.7	210.8	202.9	20102	190.4	191.8	187.2	182.8
GEONETRIC ALTITUDE MSL FEET	23500.0 24000.0 24500.0	25000.0	25500.0	20500.0	27,100.0	27500.0	0.00485	29000.0	29500.0	30000°	30200•0	31000.0	31500.0	32000.0	32500.0	33000.0	33500.0	34000.0	34500.0	35000.0	35500.0	36000.0	30500.0	37000.0	37500.0	3600BC	38500.0	39000.0	39500.0	4000 0°	40500.0	41000.0	41500.n	0.00UZ#	42500.0	43000.0

AI LLAST ONE ASSUMED RELATIVE HIMIDITY VALUE WAS USED IN THE INTERPOLATION.

# 15 U	15M 1 1.1 2/ • 216	0845 MDT	
The state of the s	SINITON ACITIVAL	5 AUG. H3	ASCENSION NO. 45

UPPER AIR DAIA 2170290045 FAST-24/CHERRY TABLE 8 CONT'D

6E0DETIC COOMDINATES 52*89927 LAT DEG 136*40591 LON DEG

Hybor 170.5 -64.2 289.3 571.1 65.2 53.4 Hyboro 170.1 -66.4 270.5 669.7 66.4 64.1 Hyboro 160.0 -64.3 270.5 669.7 66.4 64.1 Hyboro 160.0 -64.3 270.5 669.7 66.4 69.1 Hyboro 160.0 -64.3 270.5 66.7 90.0 56.4 Hyboro 160.1 160.1 26.7 90.0 57.2 Hyboro 160.2 64.5 270.2 56.4 100.0 57.2 Hyboro 160.2 64.0 270.2 66.4 100.0 57.2 Hyboro 160.2 66.0 27.2 66.4 100.0 100.0 Hyboro 160.2 66.0 27.2 66.0 100.0 100.0 100.0 Hyboro 160.2 160.2 160.2 160.2 100.0 100.0 100.0 100.0 100.0 100.0 <th>GFONETRIC ALTITUDE MSL FEET</th> <th>PPESJURE MILLIDARS</th> <th>TEMP AIR DEGREES</th> <th>TEMPERATUPE R DEWPOTNT EES CENTIGRADE</th> <th>rel Hum. Percent</th> <th>DENSITY S GM/CURIC METER</th> <th>SPLED OF SOUND KNOTS</th> <th>WIND DATA LIRLCTION S LLGREES(TN) K</th> <th>1A SPEED KNOTS</th> <th>INDEX OF REFRACTION</th>	GFONETRIC ALTITUDE MSL FEET	PPESJURE MILLIDARS	TEMP AIR DEGREES	TEMPERATUPE R DEWPOTNT EES CENTIGRADE	rel Hum. Percent	DENSITY S GM/CURIC METER	SPLED OF SOUND KNOTS	WIND DATA LIRLCTION S LLGREES(TN) K	1A SPEED KNOTS	INDEX OF REFRACTION
17.4.2	•	170.5	-580-5			2A9.3	571	85.2	6	1.000004
170.1	0.00°	174.2	-59.3			283.ts	-	86.4	54.1	1.000003
16.0	00.0	170.1	h•09-			276.5	568•3	87.8	55.0	1.000062
16.20	0.00	160.0	-61.3			273.0	567.0	90.0	56.4	1.00001
154.1 -62.7 261.7 565.1 96.0 57.2 154.2 -62.7 -62.7 756.2 564.2 54.0 57.0 150.5 -64.5 -64.5 100.0 57.2 54.0 150.5 -64.7 239.3 562.4 100.0 51.8 132.7 -65.4 223.8 562.0 107.0 447.8 132.4 -65.3 223.8 562.0 107.4 43.7 122.4 -65.4 223.1 103.9 447.8 447.8 122.5 -66.3 227.9 560.0 34.2 34.0 122.5 -66.3 227.9 560.0 34.2 34.0 117.5 -64.5 107.4 562.0 107.4 34.2 117.5 -64.5 107.4 562.0 34.2 34.0 117.5 -64.5 107.4 562.0 34.0 34.2 117.5 -64.5 107.4 562.0 34.0 34.0	0000	162.0	-62.0			267.3	560.1	92.2	57.7	1.00000
154.2 -65.4 556.2 564.2 99.0 57.0 150.5 -64.1 250.0 552.8 107.0 54.3 140.8 -64.7 250.3 562.8 107.0 54.3 140.8 -64.7 250.0 106.2 107.0 54.3 130.2 -65.0 25.0 106.0 108.9 39.3 130.2 -65.0 25.0 107.0 47.8 47.8 120.4 -65.0 25.0 227.1 561.0 107.0 47.8 120.4 -65.0 27.0 27.0 49.2 34.0 34.0 120.5 -60.0 27.0 49.2 34.0 34.0 34.0 120.0 -65.0 27.0 49.2 34.0 34.0 34.0 110.2 -65.0 40.0 40.0 40.0 40.0 34.0 110.2 -65.0 40.0 40.0 40.0 40.0 40.0 40.0 110.2	0000	154.1	-62.7			261.7	565.1	96.0	57.2	1.000058
150.5 -64.1 250.8 565.3 103.2 54.3 140.6 -64.5 -64.5 23.0 56.2 107.0 51.8 130.7 -65.0 -65.0 108.9	0.00	154.2	-63.4			256.2	564.2	966	57.0	1.000057
140.8 -64.5 -64.5 245.0 562.4 100.0 51.8 140.7 -65.0 -65.0 2234.8 562.4 100.0 47.8 130.7 -65.0 -65.0 107.0 47.8 130.7 -65.0 228.4 561.6 100.0 47.8 120.0 -65.0 228.4 561.6 107.0 47.8 120.1 -65.0 227.0 107.0 47.8 47.8 120.2 -65.0 227.0 107.0 47.8 47.8 120.3 -66.0 228.0 107.0 47.8 47.8 120.4 -65.0 107.0 34.8 47.8 47.8 117.7 -66.0 207.0 49.9 34.8 47.8 34.8 34.8 35.0 34.8 36.0 34.8 36.0 <td< td=""><td>U.00</td><td>150.5</td><td>-64.1</td><td></td><td></td><td>250∙8</td><td>563.3</td><td>103.2</td><td>54.3</td><td>1.000056</td></td<>	U.00	150.5	-64.1			250∙8	563.3	103.2	54.3	1.000056
145.2	0.00°	140.8	-64.5			245.0	562.8	107.0	51.8	1.000055
13.7.7 - 65.0 139.7 - 65.0 233.8 562.0 109.4 43.7 13.2.2 - 65.3 -65.6 228.1 561.6 107.4 36.2 12.4.6 - 65.9 -65.6 27.9 560.8 107.4 36.2 12.4.6 - 65.9 -66.3 217.9 560.8 107.4 36.2 12.5.1 - 66.0 207.4 560.7 94.2 34.8 12.5.3 - 64.5 108.5 103.9 34.8 117.5 - 64.0 106.4 567.4 560.7 34.8 111.7 - 64.2 106.4 56.4 56.4 26.4 110.2 - 65.0 106.4 56.4 26.4 26.4 110.5 - 66.1 106.4 56.4 56.4 26.4 110.6 - 66.2 106.4 56.4 56.4 26.4 110.6 - 66.2 107.4 56.1 56.4 56.4 110.6 - 66.2 107.4 56.1 56.4 56.4 110.6 - 66.2 107.4 56.1 56.4 56.4 110.6 - 66.2 107.4 56.4 56.4 10.7 - 66.4	J.00	143.2	-64.7			239.3	562.4	108.3	47.8	1.000053
13.2.2 -65.3 228.4 561.6 108.9 39.9 13.2.9 -65.6 -65.6 273.1 561.2 107.4 36.2 12.5.4 -66.3 212.9 560.8 99.3 34.8 12.5.4 -66.0 207.4 560.8 99.3 34.8 12.5.4 -66.0 207.4 560.1 99.3 34.8 117.3 -64.0 106.9 207.4 563.4 62.8 34.2 117.3 -64.0 106.4 563.4 62.8 34.8 34.2 111.7 -64.0 106.4 563.4 62.8 34.2 34.8 111.7 -64.0 106.4 563.4 68.4 26.9 34.2 110.2 -65.8 118.2 563.0 68.4 26.9 34.8 110.2 -65.8 118.2 563.0 68.4 26.9 34.8 110.2 -65.8 116.2 563.0 68.7 56.4 34.8	0.00	139.7	-65.0			233.8	562.0	109.4	43.7	1.00052
13.2.9 -65.6 -65.6 273.1 561.2 107.4 36.2 12.9.6 -66.3 -66.0 217.9 560.8 103.9 34.8 12.9.4 -66.0 -66.0 212.9 560.8 103.9 34.8 12.9.3 -66.0 103.9 217.9 560.9 103.9 34.8 12.9.3 -66.0 103.9 210.8 103.9 34.8 35.0 114.5 -64.0 105.4 105.4 106.4 26.9 34.2 34.8 111.7 -64.0 106.4 106.4 106.4 26.9 34.2 34.2 34.2 34.8 32.5 34.2 <	.00c	130.5	-65.3			228.4	561.6	108.9	39.9	1.000051
129.6 -65.9 103.9 34.8 120.4 -66.3 212.9 560.8 103.9 34.8 120.3 -66.0 207.4 560.7 94.2 34.8 120.3 -64.0 105.4 560.8 68.8 34.8 111.5 -64.0 106.2 200.8 52.6 34.8 111.5 -64.0 106.2 66.9 32.5 34.8 111.5 -64.0 106.2 106.2 76.4 28.9 111.5 -64.2 106.4 106.4 26.4 26.4 110.5 -64.2 166.2 17.4 26.4 26.4 100.6 -65.8 17.3 562.0 59.7 26.4 101.1 -65.8 167.1 562.0 59.7 26.4 101.2 -65.9 167.2 56.1 50.8 27.5 101.2 -65.4 167.2 56.2 17.6 26.4 102.2 -65.4 167.2	0.000	132.9	-65.6			223.1	561.2	107.4	36.2	1.000050
120.4 -66.3 99.3 35.0 120.3 -66.0 207.4 560.7 99.3 35.0 120.3 -66.0 200.8 563.0 94.2 34.8 117.3 -64.0 190.8 563.0 182.8 34.8 111.7 -64.2 190.8 563.0 68.4 26.9 110.2 -65.1 186.3 563.0 68.4 26.9 110.2 -65.1 186.3 563.0 68.4 26.9 110.2 -65.1 173.3 562.0 58.7 26.4 110.1 -65.0 173.3 562.1 50.8 27.6 110.2 -65.0 173.3 562.1 50.8 27.6 110.1 -65.0 173.3 56.0 56.0 27.6 110.2 -65.0 167.0 59.4 50.6 27.6 110.2 -65.0 167.0 56.0 27.6 27.6 110.2 -65.0 167.0 56.0 27.6 27.6 110.2 -66.0 114.0	0.000	12>.6	-659-			217.9	560 · B	103.9	34.8	1.000049
123.5 -66.0 207.4 560.7 94.2 34.8 1120.3 -64.5 -64.5 195.4 562.6 68.6 34.2 34.8 117.5 -64.5 -64.5 190.8 562.6 68.4 28.9 111.7 -64.3 186.3 562.0 59.7 26.0 110.6 -65.6 173.3 562.0 59.7 26.0 10.6 -66.8 173.3 562.0 59.7 26.0 10.6 -66.8 173.3 562.0 50.8 27.5 10.1 -65.0 173.3 560.0 50.8 27.5 10.1 -65.0 173.3 560.0 50.8 27.5 10.1 -65.0 169.1 562.1 50.8 27.5 10.1 -65.0 169.1 56.1 50.8 27.6 10.1 -65.0 169.1 56.1 50.8 27.6 10.1 -65.0 169.1 56.2 10.8 27.6 10.1 -65.0 169.1 56.1 56.1 27	0.00¢	120.4	-66.3			212.9	560.3	99.3	35.0	
120.3 -64.5 -64.5 34.2 117.3 -64.0 190.8 562.8 32.5 111.7 -64.2 190.8 563.2 76.4 28.9 111.7 -64.3 186.3 18.6 26.9 26.9 111.7 -64.3 186.3 18.4 26.4 26.9 110.2 -65.8 18.2 18.4 26.4 26.4 110.2 -65.8 17.3 562.0 59.7 26.0 110.2 -65.0 17.3 562.1 56.0 27.6 110.1 -65.0 17.3 56.0 27.6 26.0 110.1 -65.2 165.4 561.0 55.3 26.4 110.1 -65.2 165.4 561.6 27.6 26.0 110.2 -65.2 165.4 561.6 27.6 26.4 110.2 -65.2 166.4 56.6 26.4 26.4 110.2 -65.2 166.4 56.6 27.6 24.4 110.5 -66.2 166.4 56.6 2	0.00	125.3	0•99-			207.4	560.7	94°5	34.8	1.000046
117.3 -64.0 114.5 -64.0 111.7 -64.2 111.7 -64.3 111.7 -64.3 111.7 -64.3 111.7 -64.3 100.2 -65.8 100.6 -64.9 100.7 -65.0 100.6 -64.9 100.6 -64.9 100.6 -64.9 100.7 -65.0 100.6 -64.9 100.6 -65.0 100.6 -65.0 100.6 -65.0 100.7 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.8 -65.0 10	0.000	120.3	-64.5			200 · B	562.8	68.5	34.2	1.000045
114.5 -64.2 76.4 28.9 111.7 -64.3 186.3 563.0 68.4 26.4 111.7 -64.3 186.3 563.0 68.4 26.4 100.9 -65.8 173.3 562.0 59.7 26.0 100.6 -64.9 173.3 562.0 59.7 26.0 100.6 -64.9 173.3 562.0 59.7 26.0 100.7 -66.2 169.1 562.1 50.6 27.5 100.8 -65.4 165.4 561.6 27.5 26.4 100.8 -66.2 166.4 56.6 27.5 26.4 100.8 -66.2 166.4 56.6 27.5 26.4 100.8 -67.0 166.4 56.6 27.5 26.4 27.5 100.8 -68.4 167.4 557.5 74.3 24.4 24.4 100.8 -68.4 167.0 557.5 76.7 24.1 100.8 -68.4 167.2 557.5 76.7 24.1 100.8 <	0.00	117.3	0.49-			105.4	563.4	82.8	32.5	1.000044
111.7 -64.3 186.3 563.0 68.4 26.4 100.9 -65.1 182.3 562.0 59.7 26.0 100.6 -64.9 178.3 562.0 59.7 26.0 101.6 -65.0 178.3 562.1 56.0 27.5 101.1 -65.0 166.2 169.1 56.1 27.5 101.1 -65.0 166.2 166.2 50.6 27.5 101.2 -66.2 166.4 56.1 57.6 27.5 101.3 -66.2 166.4 50.6 27.6 26.6 101.4 -66.2 166.4 50.6 27.5 26.6 101.4 -67.8 167.0 557.8 74.3 24.1 24.6 101.5 -68.2 144.0 557.8 76.7 24.1 23.6 101.6 -68.2 144.0 558.3 40.1 23.5 24.4 101.6 -68.2 166.9 166.9 108.0 23.6 24.1 101.7 -68.0 150.0 150.0	0.00	114.5	-64.5			190∙8	563.2	76.4	28.9	1.000042
100.9 -65.1 100.2 -65.8 100.2 -65.8 100.6 -65.8 100.6 -65.9 100.6 -65.9 100.7 -65.9 100.8 -65.0 100.8 -65.0 100.8 -65.0 100.9 -65.0 10	0.00	1111.7	-64.3			186.3	563.0	4.89	56.4	1.000041
100.2 -65.8 10.5 -64.9 10.5 -64.9 10.5 -64.9 10.5 -64.9 10.5 -65.0 90.6 -65.0 90.7 -65.0 90.8 -67.0 90.8 -67.0 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.6 -67.0 91.7 -67.0 91.8 -67.0 91.9 -67.0 91.6 -67.0 91.7 -68.4 91.8 -67.0 91.9 -68.4 91.6 -68.4 91.6 -68.4 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2 91.6 -68.2	0.00	100.3	-65.1			182.3	562.0	26.4	26.0	1.000041
103-6 -64.9 103-6 -65.4 9u-6 -65.4 9u-6 -65.4 9u-6 -65.4 9u-6 -65.4 9u-7 -65.4 9u-7 -65.4 9u-7 -65.4 9u-7 -66.2 9u-7 -67.0 155.4 561.4 61.8 25.2 155.4 561.4 155.1 559.4 155.1 559.4 155.2 74.3 161.7 557.6 161.7 557.8 161.7 144.0 161.7 557.8 161.7 144.0 161.7 144.0 161.2 23.6 161.2 23.6 161.2 23.6 161.2 23.6 161.2 23.6 161.2 23.6 161.3 100.8 161.3 100.8 161.3 100.8 161.3 100.8 161.3 <td< td=""><td>00.0</td><td>100.2</td><td>-65.8</td><td></td><td></td><td>178.5</td><td>561.0</td><td>53,3</td><td>26.4</td><td>1.300040</td></td<>	00.0	100.2	-65.8			178.5	561.0	53,3	26.4	1.300040
101-1 -65-4 562-1 51.6 27.6 9u-6 -65-4 561-5 55.6 26.6 9u-2 -66-2 161-9 560-4 61.8 25.8 9u-2 -67-0 158-5 559-4 67.3 25.2 9u-2 -66-2 158-5 71.6 24.8 9u-2 -67-8 155-1 559-4 67.3 25.2 8u-2 -68-4 155-1 557-5 74.3 24.4 8u-2 -68-4 147-8 557-5 74.3 24.4 8u-3 -68-2 144.0 557-6 76.7 24.1 8u-4 144.0 558-3 80.1 23.5 8u-6 144.0 558-3 80.1 23.5 7u-7 -68-9 150-2 93.2 23.1 7u-7 -64-9 150-4 566-2 108-0 24.5 7u-7 -64-9 150-4 566-2 108-0 24.5 7u-7 -61-9 17-9 114.5 566-2 108-0 23.4 <t< td=""><td>0.00</td><td>103.0</td><td>6.49-</td><td></td><td></td><td>173.3</td><td>562.3</td><td>8°0¢</td><td>27.5</td><td>1.000039</td></t<>	0.00	103.0	6.49-			173.3	562.3	8°0¢	27.5	1.000039
96.5 -65.4 96.7 -66.2 97.8 -67.0 97.5 -67.0 97.5 -67.0 97.5 -67.0 97.5 -67.0 97.5 -67.0 97.5 -67.0 97.5 -67.0 97.5 -68.4 97.0 -68.4 97.0 -68.2 97.0 -58.0 97.0 -58.0 97.0 -70.7 -64.0 97.2 -55.0 97.2 -57.0 97.2 -57.0	J. 0.	10101	-65.0			1.691	562.1	51.6	57.6	1.000038
90.2 -66.2 91.5 -66.2 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.5 -67.0 91.5 -68.4 91.5 -68.4 91.5 -68.4 91.5 -68.4 91.5 -68.4 91.5 -68.4 91.5 -68.7 91.5 -68.8 91.5 -68.8 91.5 -68.8 91.5 -68.8 91.5 -68.8 91.5 -68.0 91.5 -	0.00	90.6	-65.4			165.4	561.5	2 6•6	56.6	1.000037
93.8 -67.0 91.5 -67.8 89.2 -68.4 89.2 -68.4 87.0 -68.2 87.0 -68.2 87.0 -68.2 87.0 -68.2 87.0 -68.2 87.0 -68.0 87.0 -68.0 87.0 -68.0 87.0 -68.0 87.0 -68.0 87.0 -68.0 87.0 -68.0 87.0 -66.0 87.0 -60.0 87.0 -	0.00	90.5	-66.2			161.9	560.4	61.8	25.8	1.000036
91.5 -67.8	Ú • Ú	95.8	0.79-			158.5	559.4	67.3	25.2	1.000035
89.2 -68.4 87.0 -68.2 87.0 -68.0 84.0 -68.0 84.0 -68.0 84.0 -68.0 86.7 -68.0 86.7 -68.0 86.6 -67.8 86.6 -67.0 70.7 -67.8 70.7 -64.9 70.8 -67.0 70.9 -67.0 70.1 -61.9 70.2 -61.9 70.3 -61.9 89.0 -61.7 89.0 -61.7 89.0 -61.4 89.0 -61.4	0.00	91.5	8•/9-			155.1	558•3	71.6	24.8	1.000035
87.0 -68.2 147.0 557.8 76.7 24.1 84.8 -68.0 78.2 23.8 86.7 -68.0 78.2 23.8 80.6 -66.9 130.2 558.5 86.6 23.1 70.7 -64.9 131.6 562.2 93.2 23.1 70.7 -63.0 127.2 566.2 100.8 24.5 70.1 -61.9 566.2 108.0 24.5 70.3 -61.7 117.5 566.3 106.6 23.4 89.6 -61.6 114.5 566.3 105.6 23.4 111.7 567.0 99.2 22.8	0.00	89.5	±68-4			151.7	557.5	74.3	54.4	1.000034
84.8 -68.0 78.2 82.7 -67.8 140.3 558.3 80.1 80.6 -66.9 130.2 558.3 80.1 70.7 -64.9 150.2 93.2 93.2 70.7 -64.9 167.2 566.2 108.0 70.1 -61.3 117.5 566.3 108.0 71.3 -61.7 114.5 566.7 103.4 67.9 -61.4 111.7 567.0 99.2	0.0	9.78	-68.2			147.8	557.8	76.7	24.1	1.000033
82.7 -67.8 80.1 80.6 -66.9 80.1 80.6 -66.9 80.6 70.7 -63.0 127.2 56.2 70.7 -61.9 123.5 566.2 108.0 70.1 -61.9 120.4 566.2 108.0 70.1 -61.0 117.5 566.5 106.6 69.6 -61.6 114.5 566.7 103.4 67.9 -61.4 111.7 567.0 99.2	0.00	84.7	-68.0			144.0	558.0	78.2	23.8	1.000032
0 80.6 -66.9 86.6 0 74.7 -64.9 131.6 562.2 93.2 0 70.7 -63.0 100.8 100.8 0 74.9 -61.9 123.5 566.2 108.0 0 73.1 -61.0 108.0 108.0 0 69.6 -61.7 114.5 566.5 103.4 0 67.9 -61.4 111.7 567.0 99.2	00°u	82.7	-67.8			140.3	558•3	80.1	23.5	1.000031
0 70.7 -64.9 93.2 0 70.7 -63.0 100.8 0 74.9 -61.9 108.0 0 75.1 -61.9 108.0 0 75.1 -61.0 108.2 0 69.6 -61.7 105.6 0 69.6 -61.6 114.5 566.7 0 67.9 -61.4 111.7 567.0 99.2	0.00	900	-66.9			136.2		86.6	23.1	1.000050
70.7 -63.0 100.8 123.5 566.2 108.0 74.9 -61.9 100.8 123.5 566.2 108.0 75.1 -61.0 100.2 100.4 566.3 100.2 11.3 -61.7 105.6 111.5 566.5 103.4 67.9 -61.6 111.7 567.0 99.2	000	7002	6.49-			131.6		93.2	23.1	1.000029
74.9 -61.9 123.5 566.2 108.0 75.1 -61.0 120.4 566.3 108.2 71.3 -61.7 117.5 566.5 105.6 69.0 -61.6 114.5 566.7 103.4 67.9 -61.4 111.7 567.0 99.2	000	7007	-63.0			127.2		100.8	23.6	1.000028
75.1 -61.8 108.2 71.3 -61.7 117.5 566.5 106.6 69.0 -61.6 114.5 566.7 103.4 67.9 -61.4 111.7 567.0 99.2	.00°C	74.9	6-19-			123.5	566.2	108.0	24.5	1.000027
71.3 -61.7 1105.6 69.6 -61.6 114.5 566.7 103.4 67.9 -61.4 111.7 567.0 99.2	0000	75.1	-61.8			120.4	566.3	108.2	24.2	1.000027
69.6 -61.6 114.5 566.7 103.4 22. 67.9 -61.4 111.7 567.0 99.2 22.	0.00	71.3	-61.7			117.5	566.5	106.6	23.4	1.000026
n 6/·9 -61·4 111.7 567·0 99.2 22.	0.00	9•69	-61.6			114.5	566.7	103.4	ò	1.000026
	0.00r	•	4.19 -			111.7	567.0	99.5	å	1.000025

GEODLTIC COOMDINATES 32.49927 LAT DEG 136.40591 LON DEG	INDEX OF REFHACTION	1.000024	1.000024	1.000023	1.000022	1.900022	1.000021	1.00n021	1.000020	1.000020	1.000019	1.000019	1.000018	1.000018	1.000017	1 - 000017	1.000017	1.000016	1.000016	1.00015	1.000015	1.000015	1.000014
6E0DLT1 32 136	SPEEU KNOTS	22.6	22.3	21.A	20.7	19.9	20.4	20.9	21.7	22.7	22.9	22.8	21.7	20.2	20.1	21.7	23.6	26.3	28.8	29.5	29.7		
	WIND DAIA LIRECTION S	95.8	35.5	9°06	87.4	0.49	0.40	0.43	78.6	73.3	72.0	71.9	75.8	83.6	88.3	88.0	8.88	91.7	0.46	95.5	6.96		
JATA 15 IEKRY CONT'D	SPEED OF SOUND KNOTS	567.2	567.5	567.8	568.0	568.3	268•6	568·E	569.1	9•695	570+3	570.9	571.6	572.0	572.0	572.0	572.0	572.0	572.6	573.7	574.8	575.9	576.9
UPPER AIR DATA 2170290045 EAST-28/CHERRY TABLE 8 CONT'D	DENSITY S GM/CURIC METER	108.9	7.001	103.5	101.0	3°86	0 •95	93.6	611.3	69.9	A6.6	84.3	A2.2	R0.1	78.2	76.3	74.5	72.8	40.6	0.69	67.1	65.3	63.5
-	hel.Hum. Percent																						
2.75 Fret MSL 0845 MDT	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	-61.2	0.19-	-60.6	-60.6	1-60-4	-6U•Z	0.09-	-59.8	-136·th	-58.9	-58•4	-57.9	-57.6	-57.6	-57.0	-57.6	-57.6	-57.1	-56.3	-55.5	-54.7	-53.8
TIT ^{!J} DL 591 ND. 45	PRES ₃ UR _E MILLI ₁₃ AR _S	600.3	•		61.6	60.1	200	57.5	5.00	24.6	53,3	54.0	50.B	47.6	†•Ω†	41.02	40.1	0.0	C•+t	6.24	41.9	40.9	¢0•0
STATION ALTITUDE 3912.7 5 aug. 83 ascensium no. 45	GFOWETRIC ALIITUDE MSL FEET	0.500.0	0.00040	0.000.0	0.00000	65500.0	0.00000	0.0000	0.000.0	67500.0	0.000na	68500.0	69000°n	69500.0	70000.0	10500.0	71000.0	71500.0	72000.0	72500.0	7.5000.0	7.5500.0	74000.0

STATION ALTITUDE 3912.75 FEET MSL. 5 AUG. 03 0845 MDT ASCENSION NO. 45

MAIIDATORY LEVELS 2170290045 EAST-28/CHERRY

GEODLTIC COOKDINATES 32-89927 LAT DEG 136-40591 LON DEG

TABLE 9

PRESSURE GEOPOTFNIIAL	OPOTFNIIAL		TEMPERATURE	REL. HUM.	WIND DATA	AIA
MILLIBARS	FEET	A 1 R DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIMECTION DEGMEES (TN)	SPEED KNOTS
A50.0	5157.	22.9	11.0	47.	129.5	3
A041.0	6881.	19.5	7.5	46.		0.9
750.n	8693.	16.1	S-#	40.	20.1	11.3
700·u	10608.	12.4	†• ‡	58•		19.0
650 ⋅ 0	12631.	7.1	.	62•		20.5
600.n	14772.	1.6	-5.3	•09		25.8
550·0	17055.	-1.7	-55.6	14.		25.1
500.0	19525.	-6.1	-22.4	26•		21.2
450.0	22212.	-9.8	-24.8	28•		24.2
400.0	25157.	-16.6	-27.0	•0+		30.5
350.0	26408.	-23.3	-38.8	22.		33.7
300.0	32047.	-31.8	-47.1	20.		31.3
250.0	36189.	-41.6				41.2
200.0	41023.	-53.2				48.4
175.0	43808.	-59.1				54.0
150.0	46937.	-64.2				54.1
125.0	50579.	-66.5				35.2
100.0	55046.	-65.0				27.2
80°n	59461.	-66.2				23.1
J.07	62161.	-61.6				25.0
U•09	65304.	-60.3				19.9
50.0	69052.	-57.6			80.0	20.8
40.0	13694°	-53.8				

^{**} AI LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

A STATE OF THE STA

4051.00 FIFT MSL	0945 MDT
-	7.0
ದ	83 JN 140. 197
STALION	5 AUG. 83 ASCLUSION NO.

UATA		
SIGNIFICANT LEVEL (2170030107	JALLEN

6E0DLTIC COONDINATES 33-16712 LAT DEG 106-49511 LON DEG

Texts de l'élégébes. Bélééééée de sous de la little de la

_	2	,	
L	ų		
	פ		
	_		

PPESSURE	6F(TEMPE	TEMPERATURE	KEL . HUP
,		AIR	DEWPOINT	PERCENT
MILLIENARS	J'uW	L/A	CENT LORADE	
882.9	•	G•₩Z	14.3	
676.8	4250.B	•	12.8	
850.0	5142.1	22.5	11.9	51.0
777.8	_	•	7.0	•
758.5	8363.4	•	3. ¢	•
700.0	10595.8	•	5.1	•
	11767.4	9. ¢	ខ្លួ	•
7.	12547.1	9. 4	5. 9	•
۲.	146.84.9	•	3	•
ď	15241.2	1.4	-13.1	53.0
=	17466.0	-2.1	-24.5	•
0	18865.2	•	-27.0	
0	19520.5	16.4	-20.7	•
Š	21627.5	-10.5	-22.1	37.0
_	22489.4	_	-23.6	33.0
ç	25162.6	-16.8	•	
ď	26458•6	-18.5	-35.3	21.0
c.	32n72.3	-32.5	•	•
c	34647.5	1.01		
ç	36199.8	•		
0.00	41040.4	-53.7		
۲,	42484.A	-57.7		
71.3		-60.7		
c.	0.69994	-64.1		
45.7	_	•		
9	48124•4	-64.7		
28.4	50088.6	-66.0		
20.1	51432.1	-64.1		
5.	53646.3	-68.7		
n. n	55078•4	-67.8		
87.0	57425.9	-70.3		
۲.	_	-60.4		
۲.	62261.3	-59.7		
0.0	8.14569	-58.1		
÷	•	•		
40.5	73684.8	-51.2		

TATION ALITIUDE 4651.00 FEET ESE	1945 MDT
ALITIUDE 465	5 Aug. 83 Scension 40. 107
TATION	5 AUG.

UFPER AIR DAIA 2170030107 JALLEN

A STANDARD CONTRACTOR OF THE STANDARD CONTRACTOR

6E0DETIC COMMOTATES 33-16712 LAT DEG 106-49511 LON DEG

_
_
ш
표
Q,
—

INDEX OF REFRACTION	1.000299 1.000288	•	1.000265	• •	•	1.000243	•	1.000234	1.000230	•			• •	1.000199	•	1.000163	1.000175	1.000171		1.000163	1.000156	1.000154	•	. n001	1.000147	.00014	1.000144		.000 ·	5 TUOU	51000	1.000132
SPEEU KNOTS	2.1	8° 6	2.0	7.2	∾ .	15.1 17.6	∞ .	18.4	19.0	20.4	22.1	1.42	26.3	26.2	25.6	25.2	25.0	24.9	54.5	72.5	72.6 26.6	27.7	27.3	26.8	•	24.9	25.6	26.5	-	29.0	6	30.8
WIND DATA UIRLCTION S DEGREESTIN) K	120.0	189.1	\$ 10 Z		•	32.7	38.5	43.7	51.7	2.40	ທີ່ ເກີ	1000	26.6	57.3	54.5	†• 09	62.7	7.99	6.07	T (78.7	81.5	81.5	81.5	79.9	78.1	77.4	a 0/	ສ•ງ ເ	6.9/	•	18.1
SPEED OF SOUND KIJOTS	673.6	671.0	1068.4	667.1 665.9	665.4	065.0	662.3	660.9	658.0	656.3	054.6	652.9	651.5 650.1	_		_	_	644.5	543		641.5		to 37 • to	636.5	635.4	634.4	633.3	632.3	631.8	031.6	6.30 • 1	628.7
DENSITY SIGNIC METER	1026.1 1012.8 999.2	985.6	958.8	932.7	917.5	902.4	877.0	865.6	842.4	831.4	850.5	809.6	786.8 786.8	775.6	764.6	752.6	740.4	728.7	717.2	8·c0/	6.4°7	674.0	663.B	_	642.7	632.3	622.1	•	•	•	580.7	571.8
KEL.HUM. PERCENT	53.0 48.8	51.0	51.0	51.0 51.0	49.1	48.0	55.1	58.7	69.6	77.7	80.R	78.2	74.8	67.8	64.3	46.0	31.0	27.2	23.4	19.6	16.0	16.0	16.4	_	22.3	26.8	31.3	35.8	35.3	ŕ	å	32.6
TEMPERATUPE R DEWPOINT EES CENTIGRADE	14.5	\ - 0	-	د. د. د	4.9	ر. ئ	0 0 0 0	υ ν • • •	1 3	S•8	4.7	3•0	r + 1	0.0-	1. F. 1	₽•₽-	-14.2	-16.5	-1 n .9	-21.6	-24.5	15.45 196.4	-27-11	-25.8	-25.1	-23.9	-22.9	-22.5	-22.1	* C	24.7	6.26-
TEMPE Alr Degrees	24.5 23.0	21.7	19.6	18.6 17.5	17.2	16.9	14.5	13.3	10.7	6.0	7.8	6.5	ಕ್ ಗ್ರ	3.5	2.1	1.5	1.0	•2	9	-1.4	2.5	0.0	1 2 4	3.0	-7.3	-8.2	-9.1	-10.0	-10.3	-10.5	•	-12.9
PRESSURE MILLIDARS	882.9 865.2	839.3	810.2	790.1	760.4	7.1.1.7	726-1	713.2	684.8	67/103	0.099	652.3	64U•8	61/19	60009	594.6	583.4	572.4	261.7	551.1	2.04S		516.5	2010	4004	481.3	472.0	462.8	450.8	6.444	430.1	451.5
GEOMETRIC ALTITUDE MSL FEET	4051.0 4500.0	5500.0	0.0000	7500.0	8000.0	4500.0	9500.0	10000.0	0.00011	11500.0	12000.0	12500.0	13000.0	14000.0	14500.0	15000.0	15500.0	10000	10500.0	17000.0	17500.0	15000.0	6.00001	19500.0	26000.0	20500.0	21000.0	21500.0	22000.0	22500.0	23000.0	23500.0

The body of the first of the forest of the second of the second of the first of the forest of the fo

en eine eine eine bestehten der eine eine bestehte Betreite besteht besteht besteht besteht besteht bei en der

STATION ALTITUDE "EST-NO FIFT MSE 5 AUG. 83 0945 ASCENSION NO. 107

UPPER AIR DAIA 2170030107 JALLEN

GEODETIC COOKDINATES 33-16712 LAT DEG 106-49511 LON DEG

TABLE 11 CONT'D

A INDEX SPEEU OF KNOTS REFRACTION	ii.		32.1 1.000120	-	28.8 1.000113	_	27.2 1.000109	7	-	28.1 1.000102	29.3 1.000101	_		35.0 1.000096	-	-	7		1.00008	.2 1	1	41.9 1.000083	42.5 1.000082	-	_	:	-	7	50.3 1.900073	-	:	52.3 1.000070	53.5 1.000068	54.9 1.000067	58.3 1.000066	61.7 1.000065
WIND DAT LIRLCTION DEGREES(TN)	78.8 79.5	81.3	83.7 86.1	87.5	89.1	89°3	₹.05 7.05	6.06	90.2	89.2	68.2	87.3	87.2	87.5	67.9	₽•88	89.3	90.5	6.06	61.7	92.4	93.1	92.2	91.2	0.06	0.68	9.68	90.1	89.5	88.8	88.2	67.6	87.2	6,99	4°09	80.2
SPEED OF SOUND KNOTS	627•3 625•8	023.3	622.5	620.1	618.6	617.0	615.5	612.4	610.9	ۥ609	607.7	606.2	9.409	602.7	600·8	598.8	6.969	594.9	593.6	595.5	591.4	590.2	588.7	587.3	585.9	584 • 5	583.0	581.6	580.1	578.7	577.2	575.4	573.6	571.8	570.7	9.695
DFNSITY S GM/CURIC METER	563.1 554.5	536.4	527.5	510.1	502.0	404.1	486.2	471.0	463.6	456.3	7.644	442.1	435.2	428.5	422.0	415.5	409.2	402.9	395.8	388.5	381.3	374.5	367.5	360.9	す・サいり	348.0	341.0	335.6	329.6	323.7	318.0	312.4	307.0	301.7	295.0	289.7
KEL.HUM. PERCENT	32.4	29.1	24°9	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	17.5**	13.4**	**h*6	•	1.2**																		
TEMPERATUPE R DEWPOINT EES CENTIGRADE	-27.0 -28.1	-30.9	-33.1	3.00	-37.5	-38.0	7.08-	-41.8	6.54-	6.5.4-	-45.0	-46.1	-47.2	-50.0	-53.5		-61.3	-74.6																		
TEMI AIR Degrees	-14.1	-17.2	6.21-	0.61-	-21.1	-22.3	-23.6	-26.1	-27.3	-28.6	-29.8	-31.1	-32.3	-33.B	-35+3	-36.9	-38•4	-39.9	-41·U	-41.8	-42.7	-43.7	U. #1-	-45.9	-47.0	-48•1	2.64-	-50.3	-51.4	-52.5	-53.h	-55•0	-56.4	-57.7	-58.6	-59.4
PRESSURE MILLIDARS	419.0	•	380.6				340.4							294.4						250∙0			6.04S	235.5	230+1	224 • B	213.7	214.7	203.6	205+0	200.4	195.7	191.1	100.6	142.1	17/1.7
GEUMETRIC ALTITUDE HSL FEEI	24500.0	25500.0	26000.0	27000.0	27500.0	28000.0	23500.0	0.00000	30000	30500.0	31000.6	31500.6	32000.0	32500.0	33n00.0	33500.0	34000.0	34500.0	35000.0	35500.0	30000°	30500.0	37000.0	37500.0	33000.0	38500.0	39000.0	39500.0	40000.6	40500.0	J.00014	41500°0	0.00024	4-500.0	4.5000.0	43500.n

^{**} AT LLAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 F.FT MSL 5 AUG. 83 0945 MDT ASCENSION NO. 107

A THE STREET STREET

UPPER AIK DATA 2170030107 JALLEH

GEODETIC COGNINATES 33-16712 LAT DEG 106-49511 LON GEG

TABLE 11 CONT'D

2.72.1 566.6 93.4 65.0 2.62.3 -64.1 566.6 93.4 65.0 2.62.3 -64.2 566.6 93.4 65.0 2.62.3 -64.2 565.6 93.4 65.0 2.63.3 -64.2 565.6 93.4 65.0 2.64.9 -65.2 24.1 106.8 46.1 2.65.3 -64.2 109.9 56.1 109.9 56.0 2.65.9 -65.9 27.2 562.1 109.9 44.1 11.3 2.65.9 -65.9 27.2 562.1 109.9 44.1 11.3 2.65.9 -65.9 26.1 100.9 44.3 11.3 </th <th></th> <th>PRESJURE MILLIDARS</th> <th>TEMP AIR DEGREES</th> <th>TEMPERATUPE R UEWPOINT EES CENTIGRADE</th> <th>REL.HUM. PERCENT</th> <th>DENSITY S GM/CUBIC METER 283.9</th> <th><u>a</u></th> <th>WIND DATA UIRLCTION S DEGREES(TN) N</th> <th>cz</th> <th>INUEX OF REFRACTION 1.000063</th>		PRESJURE MILLIDARS	TEMP AIR DEGREES	TEMPERATUPE R UEWPOINT EES CENTIGRADE	REL.HUM. PERCENT	DENSITY S GM/CUBIC METER 283.9	<u>a</u>	WIND DATA UIRLCTION S DEGREES(TN) N	cz	INUEX OF REFRACTION 1.000063
-62.3 766.3 565.6 564.9 97.9 62.1 -62.7 25.0 564.1 103.6 56.9	169.5	ე ი <u>.</u>	-61.0 -61.6			272.1		4.86 4.86	65.0	
-65.9 -64.2 -64.2 -64.2 -64.2 -64.2 -64.3 -64.4 -64.4 -64.4 -65.9	161.	~	-62.3			266.3	-	6.76	62.1	
-65.5 -65.5	157	in i	-62.9			260.6	,	103.6	58.9	
-65.6 244.7 56.3 109.9 51.6 -64.0 -64.0 23.5 562.3 109.6 44.6 -65.6 -65.9 562.3 109.6 44.6 -65.6 -65.9 562.3 109.6 44.6 -65.6 -65.9 562.3 109.6 44.6 -65.6 -65.9 562.1 100.9 44.6 -65.9 -65.9 560.1 100.2 44.6 -65.9 -65.9 560.1 560.8 34.8 36.0 -64.2 190.0 563.1 78.7 34.5 16.0 24.9 36.0 36.0 34.5 16.0 24.9 36.0	155	מ ה	163.0			0.002	1.400	8.001	26.7	
-64.6 -65.3 -65.6 -65.9	7 4	-	7.52			244.7	561.8	109.9	51.6	
-64.9 -65.3 -65.1 108.0 44.6 -65.3 -65.3 -65.3 -65.3 -65.3 -65.3 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.4 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.3 -7 -65.4 -7 -	142	ις.	-64.8			238.5	562.3	109.8	48.1	
-65.5 -65.6 -65.6 -65.6 -65.6 -65.6 -65.6 -65.6 -65.7	139	•	6.49-			232.5		108.0	9.44	1.000052
210.8 560.8 94.8 37.8 56.8 64.7 64.7 21.0 561.5 84.0 36.8 36.8 66.3 66.3 66.3 1 78.7 34.5 66.3 66.3 1 78.7 34.5 66.3 66.3 1 78.7 34.5 66.3 66.3 66.3 67.2 26.4 29.6 66.3 67.2 26.4 180.0 558.9 67.2 26.4 29.6 66.5 66.5 66.5 66.1 24.9 180.0 558.9 64.0 24.9 180.0 558.9 64.0 24.9 180.0 558.2 66.1 27.2 28.5 66.2 66.1 27.0 66.1 27.2 28.5 66.2 66.1 27.0 28.8 66.1 66.4 557.7 62.2 28.5 66.1 175.0 558.9 60.1 27.2 28.6 66.1 66.4 557.7 60.1 27.2 28.6 66.1 175.0 558.9 147.4 556.9 147.0 28.8 167.0 28.8 167.0 28.8 167.0 28.8 167.0 28.8 167.0 28.8 167.0 28.9 110.1 27.0 28.8 167.0 28.9 110.1 27.0 28.8 167.0 28.9 110.1 27.0 28.8 167.0 28.9 110.1 27.0 28.9 110.1 27.0 28.9 110.2 569.9 110.1 27.0 28.8 110.2 569.9 110.1 27.0 27.8 110.2 569.9 110.1 27.0 27.8 110.2 569.9 110.2 569.9 110.1 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0	130 130	ه م	-65.3			227.2		104.6	41.3	1.000051
-65.4 -65.4 -64.7 -64.7 -64.2 -64.2 -64.2 -64.2 -64.2 -65.3 -64.2 -65.3 -64.2 -65.3 -65.3 -65.3 -65.4 -65.4 -65.4 -65.4 -68.2 -68.2 -68.2 -68.2 -68.2 -68.2 -68.2 -69.1 -69.5 -69.1 -69.5 -69.1 -69.5 -69.6 -69.1 -69.6 -69.1 -69.7 -69.7 -69.7 -69.8 -69.8 -69.8 -69.9	124	9	-65.9			216.8	560 · A	8.46	37.8	1.000048
-64.7 205.1 562.5 84.0 36.0 1 -64.2 -64.2 199.6 563.1 73.0 32.3 1 -65.3 199.6 563.1 73.0 32.3 1 -66.3 199.6 563.1 73.0 23.3 1 -68.4 180.0 558.9 67.2 26.4 1 -68.5 179.7 557.5 64.0 24.9 1 -68.5 175.0 557.5 60.4 24.9 1 -68.5 175.0 557.5 60.4 24.9 1 -68.5 170.0 557.7 60.1 27.2 28.6 1 -68.5 166.4 557.7 62.2 28.6 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1 27.2 1 1	2	8	-65.4			211.0		₽•63	36.8	
-64.2 199.6 563.1 73.0 34.5 -65.3 195.6 561.7 73.0 29.4 -66.3 199.6 561.7 73.0 29.5 -67.4 180.0 558.9 67.2 26.4 -68.5 175.0 557.5 64.0 24.9 -68.5 175.0 557.5 64.0 24.9 -68.5 175.0 557.5 60.4 24.9 -68.5 175.0 557.8 60.4 24.9 -68.5 175.0 557.2 60.0 24.9 -68.5 166.4 557.1 60.2 28.9 -68.5 166.4 557.1 62.2 28.6 -68.6 166.4 557.7 62.2 28.6 -68.6 158.9 555.9 77.0 28.8 -69.5 157.2 555.9 77.0 28.8 -69.5 147.4 565.9 49.0 32.9 -65.9 147.4 568.3 49.0 32.9 -60.1 124.7 568.3	122		1.49-			205.1		84.0	36.0	
-65.3 195.6 561.7 73.0 32.3 -66.3 191.8 560.3 69.4 29.6 1 -67.4 180.0 557.5 64.9 24.9 1 -68.5 179.7 557.5 64.9 24.9 1 -68.5 175.0 557.5 60.4 24.9 1 -68.5 175.0 557.5 60.4 24.9 1 -68.5 175.0 557.9 60.1 27.2 1 -68.2 170.0 557.1 60.1 27.2 1 -68.5 166.4 557.1 60.1 27.2 1 -68.6 158.9 556.5 77.0 28.6 1 -69.5 159.9 155.2 555.9 1 2 1 1 -69.7 167.9 566.5 77.0 28.6 1	119		2.49-			199.6	563.1	78.7	34.5	
-66.3 191.8 560.3 69.4 29.6 -67.4 -67.2 26.4 180.0 557.5 64.0 24.9 -68.5 175.0 557.5 60.4 24.9 1 -68.5 175.0 557.5 60.4 24.9 1 -68.5 175.0 557.5 60.1 27.2 1 -68.5 176.4 550.2 60.1 27.2 1 -68.6 166.4 557.7 60.1 27.2 1 -68.6 166.4 557.7 60.1 27.2 1 -69.5 156.4 556.5 77.0 28.8 1 -69.5 156.9 555.9 77.0 28.8 1 -69.5 157.7 555.3 81.0 28.8 1 -69.5 147.3 556.9 89.0 33.4 1 -69.5 141.4 569.3 89.0 34.3 1 -60.4 157.9 568.4 94.9 30.4 1 -60.7 169.0 110.0 <td< td=""><td>110</td><td></td><td>-65.3</td><td></td><td></td><td>195.6</td><td></td><td>73.0</td><td>32.3</td><td></td></td<>	110		-65.3			195.6		73.0	32.3	
-67.4 -68.4 -68.5 -68.6 -68.6 -68.2 -68.3	=	¥.	-66.3			191.8		†*69	29.6	
-68.4 184.2 557.5 604.0 24.9 1 -68.5 175.0 557.5 60.4 24.9 1 -68.2 175.0 557.5 60.4 24.9 1 -68.2 170.4 557.2 60.4 24.9 1 -68.2 170.4 557.2 60.2 28.5 1 -69.5 162.6 557.1 67.7 28.6 1 -69.5 155.2 555.9 77.0 28.8 1 -69.5 155.2 555.9 77.0 28.8 1 -69.5 155.2 555.9 77.0 28.8 1 -69.5 147.3 555.9 77.0 28.8 1 -69.5 147.3 555.9 77.0 28.8 1 -69.5 147.3 555.9 89.0 31.4 1 -69.5 141.4 560.9 89.0 34.3 1 -65.9 150.4 150.8 104.8 27.2 1 -60.1 160.2 160.9 104.	11	0:	-67.4			188.0	558.9	67.2	26.4	1.000042
-68.5 -68.5 -68.6 -67.8 -68.6 -68.6 -68.6 -68.6 -68.6 -69.1 -68.6 -69.1 -69.7 -68.6 -69.1 -69.7	č.	٠, د	4.89-			184.2	557.5	0.49	24.9	1.000041
-68.2 175.0 557.8 58.7 25.6 1 -67.8 -60.1 27.2 1	ć	٥	-68.5			179.7	557.3	7. 00	24.9	1.000040
-68.2	Ú) : ()	2.89-			175.0	557.8	28.7	25.6	1.000039
-68.6 -69.1 -69.5 -69.5 -69.5 -70.0 -69.5 -70.0 -69.5 -70.0 -69.5 -70.0 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.5 -69.6 -69.5 -69.6	Ēσ	. 0	16/05			1664	558.5	00.7	28.5	1.000038
-69.1 -69.5 -69.5 -69.5 -69.5 -70.0 -69.5 -70.0 -69.5 -70.0 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.2 -69.3 -69.2 -69.3 -60.4 -60.1	Ó		9.89-			162.6		67.7	28.6	1.000036
-69.5 77.0 28.7 1 -70.0 151.7 555.3 81.0 28.8 1 -69.2 147.3 556.4 81.0 28.8 1 -69.2 147.3 556.4 83.8 31.4 1 -65.9 141.4 560.9 80.2 34.3 1 -65.9 135.8 565.3 89.6 32.9 1 -60.4 131.1 568.3 95.9 30.4 1 -60.1 127.9 568.4 98.8 27.2 1 -60.1 127.7 568.6 110.8 22.3 1 -60.1 118.7 568.6 110.1 21.8 1 -59.9 116.1 569.6 110.1 22.8 1 -59.6 110.2 569.4 98.4 21.6 1 -59.6 107.5 569.4 91.2 20.5 1	•	3.0	-69-1			158.9		73.0	28.8	1 • 000035
-70.0 151.7 555.3 81.0 28.8 1 -69.2 147.3 556.4 63.8 31.4 1 -65.9 141.4 560.9 80.2 34.3 1 -62.6 135.8 565.3 89.6 32.9 1 -60.4 131.1 568.3 93.9 30.4 1 -60.2 127.9 568.4 98.8 27.2 1 -60.1 127.9 568.6 104.8 27.2 1 -60.1 127.7 568.6 110.8 23.3 1 -60.1 118.7 568.6 110.1 21.8 1 -59.6 116.9 569.9 104.4 22.8 1 -59.6 110.2 569.4 98.4 21.6 1 -59.6 107.5 569.5 91.2 20.5 1	6	1.0	-69.5			155.2		77.0	28.7	
-69.2 147.3 556.4 63.8 31.4 1 -65.9 6.2 34.3 1 -62.6 135.8 565.3 69.6 32.9 1 -60.4 131.1 568.3 95.9 30.4 1 -60.2 127.9 568.4 98.8 27.2 1 -60.1 127.9 568.6 104.8 27.2 1 -60.1 124.7 568.6 111.8 20.3 1 -59.9 116.1 21.7 568.9 110.1 21.8 1 -59.6 110.2 569.4 98.4 22.8 1 -59.6 110.2 569.4 98.4 21.6 1 -59.6 110.2 569.4 98.4 21.6 1	æ	80.4	-70.0			151.7		81.0	28.8	1.000034
-65.9 -65.9 -62.6 -62.6 -62.6 -60.4 -60.2 -60.1 -60.1 -60.1 -59.9 -59.9 -59.6 -59.6 -59.9 -59.6 -59.9 -59.6 -59.9 -59.6 -59.6 -59.9 -59.6 -59.6 -59.9 -59.6 -59.6 -59.9 -59.6 -59.6 -59.6 -59.9 -59.6 -50.6	œ	2.0	-69.5			147.3	556.4	63.8	31.4	
1.55.6 1.55.8 565.3 69.6 32.9 1 1.50.4 1.51.1 568.3 93.9 30.4 1 1.50.2 1.27.9 568.4 96.8 27.2 1 2.50.1 1.27.9 568.6 104.8 27.2 1 1.50.1 1.27.7 568.6 111.0 20.3 1 1.50.2 1.68.6 110.1 21.8 1 1.50.3 112.9 569.1 104.4 22.8 1 1.50.5 1.50.9 104.4 22.8 1 1.50.5 1.50.9 107.5 569.4 98.4 21.6 1	Œ	. t	-65.9			141.4		80.2	34 • 3	
1 -60.4 131.1 568.3 95.9 30.4 1 1 -60.2 127.9 568.4 98.8 27.2 1 3 -60.1 124.7 568.6 104.8 27.2 1 4 -60.1 124.7 568.6 110.8 23.3 1 7 -59.9 112.7 568.9 110.1 21.8 1 9 -59.6 112.9 569.2 104.4 22.8 1 10 -59.5 110.2 569.4 98.4 21.6 1 1 -59.4 107.5 569.5 91.2 20.5 1	œ	۲۰۱	4.29-			135.8	_	9.68	32.9	
1 -60.2 127.9 568.4 98.8 27.2 1 3 -60.1 124.7 568.6 104.8 23.3 1 4 -60.1 124.7 568.6 111.8 20.3 1 7 -59.9 118.7 568.9 110.1 21.8 1 9 -59.8 116.9 569.1 104.4 22.8 1 1 -59.5 110.2 569.4 98.4 21.6 1 1 -59.4 107.5 569.5 91.2 20.5 1	0	80.1	-60.4			131.1	568.3	93.9	30.4	
3 -60.1 124.7 568.6 104.8 23.3 1 4 -60.0 121.7 568.9 111.8 20.3 1 5 -59.8 115.8 569.1 103.0 23.3 1 5 -59.6 112.9 569.2 104.4 22.8 1 6 -59.5 110.2 569.4 98.4 21.6 1 6 -59.4 107.5 569.5 91.2 20.5 1	~	1.0	2.09-			127.9	568.4	8.86	27.2	1.000028
-4 -60.0 121.7 568.9 111.8 20.3 1 -7 -59.9 118.7 568.9 110.1 21.8 1 -9 -59.6 112.9 569.2 104.4 22.8 1 -6 -59.5 110.2 569.4 98.4 21.6 1 -6 -59.4 107.5 569.5 91.2 20.5 1	7	 	-60.1			124.7		104.8	23.3	1.000028
.7 -59.9 118.7 568.9 110.1 21.8 1 .9 -59.8 112.9 569.2 104.4 22.8 1 .2 -59.6 110.2 569.4 98.4 21.6 1 .0 -59.5 91.2 20.5 1	7	= +	-60.n			121.7	-	111.8	20.3	1.000027
.9 -59.8 115.8 569.1 108.0 23.3 1 112.9 569.2 104.4 22.8 1 110.2 569.4 98.4 21.6 1 10.2 569.4 91.2 20.5 1	7	•	-59.9			118.7		110.1	21.8	1.000026
.2 -59.6 1.00002 .6 -59.5 1.0002 .0 -59.4 98.4 21.6 1.00002 .0 -59.4 107.5 569.5 91.2 20.5 1.00002	7	6.0	-59.8			115.8		100.6	23.3	1.000026
.6 -59.5 110.2 569.4 98.4 21.6 1. .0 -59.4 107.5 569.5 91.2 20.5 1.	9	7.5	-59.6			112.9		†• †0 T	22.8	00002
•0 -59•4 107•5 569•5 91•2 20•5 1•00002	9	•	-59.5			110.2	-	₽. 8€	:	1.000025
	δc	•	4.65-			•	569.5	_	•	1.000024

MSL		
14	=	
خا	Ē	
405 LOD ELET MSL	0945	
10.4		
STAFION ALTITUDE		167
Ë		
Ξ	_	ž
¥	ź	곡
Z		115
=	ž	7
<	~	ڒ
70	6 7	~

UPPER AIR DATA 2170030107 JALLEN

GEOPETIC COORDINATES 33-16712 LAT DEG 106-49511 LON DEG

BARRIE BURGORIAN - TAKARRIKA BARRIESA BARRIESA BARRIESA BARRIESA

ATCENSION NO. 10.	• 02			TABLE 11 CONT'D	CONT 'D	-	106++901
GEOMETRIC PRESSURE	PRESSURE	TEMFRATUPE	KEL.HUM.	DFNSITY	SPEED OF	WIND DATA	Ī
AL F1 FUUL MSL FEET	MILLIUARS	IL AILLIDAKS DEGREES CENTIGRADE METER KNOTS (PERCENT	GM/CUBIC METER	SOUND	DEGREES(IN) KNOTS	S REFI

DIME THIC	PRESSURE	TEMPERATUPE	KEL. HIJM.	DFNSITY	SPEED OF	WIND DATA	٧L	INCEX	
II TUUL			PERCENT	GM/CUBIC	SOUND	UIRLCT10W	SPEED	S	
il FEET	MILLIUARS	DEGREES CENTIGRADE		METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION	
04006.n	64.4	-59.3		104.9		01.7	19.8	1.000023	
0.00540	65.9	-59.2		102.3		71.7	19.6	1.000023	
65000.0	4.19	-59.1		მ•6ს		9.69	20.7	1.000022	
65500.0	54.9	-59.0		4.70	570.2	9*89	22.0	1.000022	
0.00000		-58.8		95.0		9.89	23.3	1.000021	
66500.0		-5a-7		92.7		69.3	24.7	1.000021	
0.000/0		-58.6		G•06		70.5	25.7	1.000020	
67500.0		-58.5		AB.3		74.8	24.7	1.000020	
63000.0	50.1	-58.4		A6.1		79.5	23.9	1.00001	
68500.0		-56.3		0.48		9* ħΩ	22.9	1.000019	
69000.0		-58.2		R2.0		50.	22.0	1.000018	
69500.0		-57.8		79.9		656	23.0	1.000018	
70000		-57.4		77.8		92.0	26.1	1.000017	
70500.0		-56.9		75.8		91.4	28.9	1.000017	
71000.0		-56•4		73.9		91.1	30.4	1.00016	
71500.0		-55.9		72.0		90.9	31.9	1.000016	
72000.0		6.44-9		70.0				1.000016	
72500.0		-55⋅B	•	68.0				1.000015	
75000.0		-52.7	•	66.1				1.000015	
73500.0		-51.6		7.49				1.00004	

STATION ALTITUINE 4051.00 Fert MSL 5 AUG. 83 0945 MDT ASCENSION NO. 107

MANDATORY LEVELS 2170030107 JALLEN TABLE 12

vEODETIC COOKDINATES 33-16712 LAT DEG 106-49511 LON DEG

5932060.4	LA J	3310 299.4 291.7 290.4 200.2 200.2 200.2 200.2	PERCENT 51. 51. 63. 78. 59. 19. 18. 34. 21. 21.	DEWPOTHI CENTIGRADE 11.9 8.5 5.8 5.1 2.6 -21.9 -21.9 -23.1 -29.5 -47.3	22.5 22.5 18.9 16.5 11.9 6.2 11.4 1.7 1.7 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	FEET 6860. 8672. 10586. 12605. 14743. 14743. 17033. 19500. 22170. 22171. 22171. 40942. 43713. 46839. 54910.	MILLIBAKS 850.0 800.0 750.0 700.0 700.0 850.0 850.0 175.0 1150.0 100.0
C 100	100 100 100 100 100 100 100 100	107.5			-59.0	65222.	0.09 0.09
		107.2			-59.7	62055.	70.0
		5.09			-67.8	54910.	100.
5491067.8 b0.2		88+3			-65.2	50472.	125.0
50491065.2 88.3 5491067.8 60.2		109.0			-64.1	46839.	150.0
4683964.1 109.0 5049265.2 88.3 5491067.8		87.2			0.09-	43713.	175.0
4371360.0 87.2 4683964.1 109.0 5049265.2 88.3 5491067.8	# 25 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	88.5			-53.7	40942.	200.0
4094253.7 88.2 4371360.0 87.2 4683964.1 109.0 5049265.2 88.3 5491067.8		95.6			-43.0	36121.	250.0
3612143.0 4094253.7 4371360.0 4683964.1 5049265.2 5491067.8	wu 55 444 464 464	87.3	21.	-47.3	-32.5	32009.	300.0
3200932.5 -47.3 21. 87.3 3612143.0 4094253.7 88.2 4371360.0 4683964.1 109.0 5047255.2 5491067.8		4.68	21.	-39.4	-23.3	28376.	356.0
2837623.3 -39.4 21. 89.4 3200932.5 -47.5 21. 87.3 3512143.0 4094253.7 4371360.0 4683964.1 109.0 5047265.2 5491067.8		80.3	32.	-29.5	-16.A	25121.	400.0
2512116.8 -29.5 32. 80.3 2837623.3 -39.4 21. 89.4 3200932.5 -47.5 21. 87.3 3612143.0 92.6 4094253.7 88.2 4371360.0 87.2 4683964.1 109.0 5049265.2 68.3		76.8	34•	-23.1	-10.4	22179.	450·n
2217910.4 -23.1 34. 76.8 2512116.8 -29.5 32. 80.3 2837623.3 -39.4 21. 89.4 3200932.5 -47.5 21. 87.3 3612143.0 92.6 4094253.7 88.2 4371360.0 87.2 4683964.1 109.0 5047265.2 68.3		61.5	18.	-26.7	1.9-	195un.	500·n
195006.4 -26.7 18. 61.5 2217910.4 -23.1 34. 76.8 2512116.8 -29.5 32. 80.3 2837623.3 -39.4 21. 89.4 3200932.5 -47.5 21. 87.3 3612143.0 92.6 4094253.7 88.2 4371360.0 87.2 4683964.1 109.0 5049255.2 68.3		75.2	19•	-21.9	-1.4	17033.	550.0
170331.4 -21.9 19. 75.2 195006.4 -26.7 18. 61.5 2217910.4 -23.1 34. 76.8 2217916.8 -29.5 32. 80.3 2037623.3 -39.4 21. 89.4 3200932.5 -47.5 21. 87.3 3612143.0 92.6 4094253.7 88.2 4371360.0 87.2 4683964.1 109.0 5047265.2 68.3 5491067.8	_ 21 22 2	59.4	59•	3.5-	1.7	14743.	მ∙ე09
14743. 1.7 -5.5 59. 59.4 170331.4 -21.9 19. 75.2 195006.4 -26.7 18. 61.5 2217910.4 -23.1 34. 76.8 2217916.8 -29.5 32. 80.3 2837623.3 -39.4 21. 89.4 3200932.5 -47.5 21. 87.3 3612143.0 47.5 21. 87.3 4371360.0 88.2 4683964.1 109.0	_ ~~ 33	56.2	78•	5.6	6.2	12605.	650.0
12605. 6.2 2.6 78. 56.2 14743. 1.7 -5.5 59. 59. 59. 4 170331.4 -21.9 19. 75.2 195006.4 -26.7 18. 61.5 2217910.4 -23.1 34. 76.8 2837623.3 -39.4 21. 89.4 23.5 -47.5 21. 87.3 35.12143.0 40.94253.7 4371360.0 50.4 683964.1 109.0 50.4 60.2 54.91067.8	_ ~~ 3	46.8	63.	5.1	11.9	10586.	700.0
10586. 11.9 5.1 63. 40.8 12665. 2.6 78. 56.2 147.13. 1.7 -5.5 59. 59. 59.4 17.131.4 -21.9 19. 75.2 195.06.4 -26.7 18. 61.5 21.7910.4 -23.1 34. 76.8 243.7623.3 -39.4 21. 89.4 21. 22.5 147.5 21. 87.3 35.12143.0 47.5 21. 88.2 4371360.0 504.1 109.0 504.1 55.2 64.1 109.0 50.2 5491067.8	- N-	59.4	49.	5.8	16.5	8672.	750.0
8672. 16.5 5.8 49. 29.4 10586. 11.9 5.1 63. 40.6 12665. 6.2 2.6 78. 56.2 14743. 1.7 -5.5 59. 59.4 1473. -1.4 -21.9 19. 75.2 1950. -6.4 -26.7 18. 61.5 22179. -10.4 -26.7 18. 61.5 2317. -16.8 -29.5 32. 80.3 221. -23.3 -47.5 21. 89.4 23009. -32.5 -47.5 21. 88.2 43713. -60.0 60.2 46839. -64.1 109.0 54910. -67.8 60.2	_ ~)	331.7	51.	8.5	18.9	6860.	800.0
6860. 18.9 8.5 51. 331.7 8672. 16.5 5.8 49. 29.4 1 10586. 11.9 5.1 63. 40.8 1 12605. 6.2 2.6 78. 56.2 2 14743. 1.7 -5.5 59. 59.4 2 147431.4 -21.9 19. 75.2 2 12517910.4 -25.1 34. 76.8 2 2217916.8 -29.5 32. 80.3 3 2207623.3 -39.4 21. 89.4 2 3200932.5 -47.5 21. 80.3 3 4371360.0 80.2 88.2 6 4683960.0 60.2 2 5691067.8	_	180.6	51.	11.9	22.5	5139.	850 • n
5119. 22.5 11.9 51. 180.6 6860. 18.9 8.5 51. 331.7 8672. 16.5 5.8 49. 29.4 1 12605. 6.2 2.6 78. 63. 40.8 12607. 1.7 -5.5 59. 59. 59.4 170331.4 -21.9 19. 75.2 2 195006.4 -26.7 18. 81.5 2 2217910.4 -23.1 34. 70.8 2 2217916.8 -29.5 32. 80.3 3 2217932.5 -47.3 21. 87.3 4 4371360.0 64.1 109.0 5 5491065.2			PERCENT	CENTIGRADE	DEGREES	FEET	LLIBAKS
FEET DEGREES CENTIGRADE CONCERN DEGREES(IN) 10 6860. 18.9 51. 180.6 31.7 16.8 63. 49. 29.4 10.10586. 11.9 5.1 63. 49. 29.4 10.10586. 11.9 5.1 63. 49. 29.4 10.10586. 11.9 5.1 63. 49.6 29.4 10.10586. 11.9 5.1 63. 59. 29.4 10.10586. 11.9 5.1 63. 59. 29.4 22.1 10.1 26.1 10.1 26.7 11.9 19. 75.2 22.1 10.1 22.1	LAU		Tir Journ				

ALTITUDE 5912-75 FIEL MSL		1 NO. 46
4	H	z
STALLON	5 AUG. H3	ASCENSION NO.

DATA		۲¥
	2170290040	EAST-28/CHERRY
516		

vEODETIC COORDINATES 32.89927 LAT DEG 136.40591 LON DEG

TABLE 13

PRESSURE	GF	TEMPE	TEMPERATURE	KEL . HUM.
4ILL INARS	A	AIR DEGREES	DEWPOINT CEUTIGRA _{DE}	PERCENT
887.5	3912.7	31.0	20.9	55.0
0.178	463.	å		29.0
850.0	•	25.3	7.9	33.0
747.1	Bu41.	ç	5•°	49.0
700.0	10651.6	12.2	†• †	59.0
ε.	13870.0		٠ ٠	74.0
8.	14477.5	2•3	-2.0	73.0
5.8	15008.0		-13.9	28.0
	15394.8	•	-14.8	26.0
539.9	17610.2	-1.9	-15.6	34.0
	19602.2	-6.3	-16.5	0.44
	21039.1	-9.3	-19.5	43.0
	21720.3	-6-7	-27.4	22.0
	22323.7	4.6-	-31.1	15.0
	23009.2	-11.4	-30.4	10.0
	25243.4	-16.3	-34.5	21.0
	27442.4	-21.2	-36.1	20.0
	28087.2	-22.3	-39.0	20.0
	29754.3	-26.3	0.24-	21.0
	32151.0	-32.5	6.04-	22.0
	33780.0	-36.6	-50.5	A.
	34062.9	-38.3	-51.9	•
	36301.7	-41.3		ı
	38502.4	-47.0		
c.	41162.5	-53.1		
	42416.4	-56.7		
	44.352.0	-60•1		
0.001	•	•		
Φ.	47824.3	•		
	50163.0	-66.7		
6	51936.6	•		
0	53668.1	1.69-		
		-67.7		
-	54498.9	-64.3		
100.0	55199.4	-64.3		
ċ	57272.7	-66.1		

3912.75 FEET MSL	
	94
ALTITUDE 83	. ON 40
STATION ALTITU 5 AUG. H3	ASCENSIO

UPPER AIK DATA 2170290046 EAST-28/CHERRY

6E0DLTIC COOMDINATES 32.89927 LAT DEG 136.40591 LON DEG

TABLE 14

N _O	326 316	000270	26.7 26.3	100260	257	S	251	# :		710	-	230	226	222	218	214	210	206	202	196	178	174	172	169	167	164	162	159	2	155	152	3	3	3	137	FO.	132
TNUEX OF KEFRACTION	1.00032	•	1.000	•	•	•	1.0002	•		1.0002	•	1.0002	•		•	•	1.00021	•	•	•	1.009178	1.000174	1.0001	•	1.0001	•	1.0001	1.00015	1.0001	1.00015	1.00015	1.0001	1.0001	1.0001	1.0001	1.0001	1.000
VTA SPEED KNOTS	2.9	2.1	3.7	2.9	3.6	5.7	8.5	10.8	17.0	12.6	M	m	13.7	m	13.9	÷	15.5	÷	ġ	18.0	•	-		•	ċ		;	÷	18.4	19.3	ċ	•	å	•	30.1	• •	35.4
WIND DATA UIRLCTION S DEGREES(TN) K	4°54	94.8	139.3	111.0	98.2	78.8	71.9	70.1	0.57	71.2	67.8	6.49	62.4	59.7	26.0	49.3	47.1	48.3	51.7	53.8	96.0	59.3	64.2	66.7	4.79	68.7	6.07	75,3	62.3	86.2	•	•	84.3	-	-	Š.	4.47
SPLED OF SOUND KNOTS	683.0	678.3	673.8		671.1	8•690	668.5		8.C00	56.20	661.5	0.099	658.5	656.9	655.3	653.7	652.2	650.6	0.649	9•249	9.249	647.3	646.1	8.440	043.6	642.3	641.0	639.7	638.4	•	635.8	÷	633.2	?	۶.	632.2	•
DENSITY S GMZCURIC METER	1005.8 1005.0	9.666	978.6	965.3	952.2	939.4	656.7	914.2	6.100	877.H	865.9	854.2	842.7	831.3	820.1	809.0	798.1	787.4	1.911	765.5	751.4	738.0	726.9	716.1	705.4	8 · h69	584 · 4	674.0	663.9	653.9	643.9	634.0	624.2	613.1	601.3	•	5A2.1
KEL. HUM. PERCENT		29.2	34.4	36.6	38.8	;	ř	45.43 5.43 5.43	0	20.6	S	58.2	9.09	63.0	65.3	9.19	6.69	72.3	73.8	71.1	28.7	26.4	28.2	30.0	31.8	33.6	36.0	38.5	41.0	43.5	43.7	43.4	*	•	•	15.8	18.0
EMPERATUPE DEWPOINT ES CENTIGRADE	20.9	•	7.8	7.7	7.5	7.3	7.0	9.	7 c	ค.	ر ب	4.6	J•#	3.2	2•5	1.7	6•	•	8•−	12.4	-13.6	-14.8	-14.9	-15.1	_	_	-15.7	-15.9	-16.2	16.5	-17.4	1 A.4	-10.4	-24.3	-20.9	-31-1	9-08-
TEMP AIR DEGREES	31.0 30.6	28.5	2	23.4	25.2	21.0	19.8	18.7	C • 7 •	15.1	13.8	12.6	11.3	10.0	8•6	7.3	0.9	4.7	3.4	2•3	2•3	2•6	1.5	ស្	9• <u>-</u>	-1.7	-2.8	-3.9	-5.0	-6.1	-7.1	-8-2	-9.5	9.6-	•	•	-11.4
PRESSURE MILL IBARS	887.5 884.9	26.4.9.5 26	840.5	825.6	811.5	79/-1	783.2	769.5	7.00	9.561	710.6	703.8	691.1	670.5	660.1	654.0	0.249	630-3	610.8	607.3	990.0	5R4•9	573.9	563.1	522.5	542.2	531.8	521.7	211.7	D•70G	492.3	486.8	473.4	464.2	452.2	440.3	43/•6
GFONETRIC ALTITUDE MSL FFEI	3912.7	4500.0	5500.0	0.0000	0.0050	7000.9	7500.0	0.000a	1.0000	0.0035	10000.0	10500.0	11000.1	11500.0		12500.0	13000.0	13500.0	14000.0	14500.0	15000.0	1.5500.0	10000.0	10500.0	17000.0	17500.0	18000.9	10500.0	19000.0	19500.0	20000.n	20500.0	<1000·0	21500.p	22nn0•0	22500.0	23000.0

3412.75 F. (T MSL.	
-	
L L L	
45	
122	
3,1	٠,
	45
چَ	
ALTITUDE 83	ASCLUSION NO.
1.5	Z
< 1	: <u>Z</u>
ي ٥	5
7	
STATION 5 AUG.	S
C.	<

UPPER AIN DATA 2170290046 EAST-20/CHLNRY

GEODETIC COONDINATES 32.49927 LAT DEG 136.40591 LON DEG

Control & Andrews Control Cont

TABLE 14 CONT'D

NOI	.000130	•n0n128	n00126	000124	• n00122	000120	000118	•000116	10114	.000112	0110	•000108	.000100	•000104	000103	000101	• 000uu	n00008	960000	000005	n00093	160000	060000	00088	•00000	• 000005	000083	• 000082	• 000000	620000	000018	000016	n00075	+0000v+	00n072	10000	00000	0000cB	000067	90000
INDEX OF REFRACTION	1.0	1.00	•	•	•	•	1.00	1.00	1.00	-	1.00				•		•	1.0	•	•	1:0	1.00	•	1.0		ŭ-1	1.0	<u>.</u>	7.5	1.0	1.0	1.0	1.0	7.5	1.0	•	1.0	ŭ - 1	ī. 1	-
TA SPEED KNOTS	35.9	35.7	35.8	35.9	35.5	34.7	33.7	32.6	31.5	30.4	29.6	29.1	29.8	34.7	39.7	40.5	41.0	41.5	45.0	37.2	31.5	28.7	27.7	30.9	33.9	36.9	39.4	40.9	42.3	43.1	0 · + +	†* †	44.8	45.7	47.3	48.9	_	•	٠	53.1
WIND DATA JIRECTION S DEGREES(TN) K	73.7	74.0	74.2	74.4	74.2	7.5.7	73.6	73.8	75.1	77.5	6.67	80.7	π•1 Ω	9.6/	78.6	78.9	79.5	79.5	79.8	83.1	88.4	93.9	0.66	100.1	101.8	103.9	105.0	105.1	104.9	103.2	101.5	100.0	ħ•86	6.96	95.3	0.46	•	•	95.9	97.2
SPLED OF SOUND NNOTS	029.1	627.8	626.4	625.1	623.8	u22•4	621.0	619.7	618.3	617.3	612.9	014.4	612.9	611.3	2.609	608.1	606.5	6.409	603+3	20109	600.1	598.8	597.8	596.7	595.3	0.460	592.5	590 • 9	589.2	587.5	585.9	584.4	582.9	581.4			576.9		574.1	572.6
DENSITY S GM/CUBIC METER	573.0	564.0	555.2	546.5	537.9	529.4	521.0	512.7	504.5	495.9	487.9	480.2	475.6	465.1	457.7	4.054	443.3	436.3	429.3	422.3	415.4	408.2	400.7	393.4	386.5	379.7	373.1	366.8	360.0	354.6	348 · D	342.4	336.2	330.2	324.3	318.5	312.0	300.0	•	295.5
KEL.HUM. PERCENT	18.7	19.3	20.0	20.7	20.9	20.7	20.4	20.5	20.0	20.0	20.5	20.5	20.6	21.1	21.3	21.5	21.7	21.9		22.0		22.0	•	*6.0	12,3**	4.9.4														
TEMPERATURE R DEWPOINT EES CENTIGRADE	-31.4		-32.6	-33.2	-34.0	-35.1	-36.1	-37.2	-34.2	-38.9	-39.8	7. Jh-	-41.5	-42.5	-43.5	-44.5	9.54-	9.94-	T-47-7	-48.B	8 to ty-	-50.8	-51.4	-53.0	-57.B	-64·0														
TEMP AIR DEGRÉES	-12.5	-13.6	-14.7	-15.8	-16.9	-18.0	-19.1	-200-2	-21.3	-22.2	-53.3	-24.5	-25.7	6.96-	-28.2	-29.5	-30.8	-32-1	-33.4	-34.6	-35.9	-36.9	-37.7	-38.6	9.68-	T-041-	-41.8	-43.1	ty • ty ty —	-45.7	-47.0	-48.1	E.64-	-50.4	-51.6	-52.7	-53.H	6.45-	-50.0	-57.1
PRESSURL MILLI _L ARS	420.9	420.4	417.1	403.9	395.8	981.9	380.0	372.4	364.8	357.4	350.0	342.8	535.7	320.7	321.8	315.1	300.4	901.9	292.5	285.1	282.9	270.8	270.8	564.9	25.9 • 1	25,04	247.8	245.0	230.A	231.5	22003	221.1	21001	211.1	2002	201.5	190.8	192.2	187.7	185.5
GEOMETRIC ALTITUDE MSL FEET	23500.0	24000.6	24500.4	25000.0	25500 • n	20000.0	26500.0	27000.0	27500°F	28000.0	28500.0	29000.0	29500.0	30000.0	30500.0	31000.0	31500.0	32000.0	32500.0	35000.0	33500.0	34000.0	34500.1	35000.n	35500.0	3cn00.0	36500.0	37000.0	37500.0	38000.0	30500.0	39000.0	39500.n	40000	40500.0	41000.0	41500.0	42000.0	42500.0	43000.0

^{**} AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

5 AUG. 83 1245 MDT ASCENSION NO. 46

UPPER AIK DATA 2170290046 EAST-28/CHERRY

TABLE 14 CONT'D

GEODETIC COOMDINATES 32.89927 LAT DEG 136.40591 LON DEG

GEONETRIC ALTITUDE MSL FEEI	PRESSURE MILLIDAKS DE	TENPERATURE AIR DEWPOLNT DEGREES CENTIGRADE	HEL.HUM. PERCENT	DFNSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA LIRECTION S DEGREES(TN) K	TA SPEED KNOTS	INDEX OF KEFRACTION
43500.0	178.9	-58.2		290.0	571.2	4°86	52.7	1.000005
44100.0	170.5	-59.3		279.0		9.66	52.4	1.000002
4500n.n	160.3	6.09-		273.0		100.4	52.6	1.000061
45500.0	162.3	-61.5		267.2	•	101.1	52.9	1.00000
40000°F	150.4	-62.1		261.5	-	102.1	52.6	1.000058
40500.0	154.5	-62.7		255.9		103.0	52.4	1.000057
4700n.0	150.8	-63.4		250.4	564.3	104.6	50.0	1.000056
47500.0	14/-1	-63.4		5.55%		106.8	46.6	1.000054
48000.9	143.5	-63.6		238.6		109.2	43.0	1.000053
48500.0	140.0	-64-3		233.5	563.0	111.4	36.2	1.000052
49000.0	130.6	-65.0		228.6	562.0	114.5	29.4	1.000051
49500.9	133.2	-65.7		223.8	561.1	113.3	25.1	1.000050
50000.0	129.9	-66.5		219.0	560.1	107.1	22.8	1.000049
50500.0	120.7	6.99-		214.1	159.4	99.5	22.2	1.000048
51000.0	123.6	-67.3		209.2		92.3	24.8	1.000047
51500.0	120.5	-67.7		204.3		86.8	27.6	1.000046
22000.0	117.5	-68.1		199.6	557.9	83.7	29.7	1.000044
52500.0	114.6	-68.6		195.1	557.2	81.0	31.9	1.000043
53000.0	111.7	-69·U		190.7	556.6	80.4	34.8	1.000042
53500.0	100.9	-69.5		180.4		79.9	37.6	1.000041
54000.0	100.2	U-69-		181.2		9.08	40.0	1.000040
54500.0	103.5	-67.8		175.7	558.2	81.6	42.2	1.000039
55000°C	101.0	-64.3		168.5	563.0	45.7	40.0	1.000038
55500.0	90.5	9•49-		164.5		92.7	35.7	1.000037
56000.0	90.1	-65.0		160.8				1.000036
56500.0	93.7	-65.4		157.2				1.000035
57000.0	91.4	-65.9		153.7	560.9			1.000034

on a banda a en alta de casa en actual en a sama esta en a sama en esta de casa de casa de casa de casa de cas

STATION ALTITUDE 3912.75 FEET MSL 5 AUG. 83 ASCENSION 110. 46

MANDATORY LEVELS 2170290046 EAST-28/CHERRY

GEODETIC COUNDINATES 32.89927 LAT DEG 136.40591 LON DEG

TABLE 15

SPEED KNOTS	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
WIND DATA DIRECTION SI DEGREES(TN) KI	142.1 01.3 72.4 64.1 67.6 67.6 79.6 105.0 94.1 96.1 96.1
REL.HUM. PERCENT	33. 41. 49. 59. 68. 44. 15. 20.
TEMPERATURE IR DEWPOINT RES CENTIGRADE	7.00 7.00 7.00 7.00 7.00 7.00 7.00 7.00
TEMP AIR UEGRÜES	255.33 171.30 172.33 173.33 17
OPOTFINITAL FEET	5168. 6904. 8725. 10641. 12663. 14804. 17103. 19575. 22256. 25276. 25271. 36222. 41063. 40682.
PHESSURE GEOPOTFIIIAL MILLIBARS FEET	850.0 800.0 750.0 700.0 650.0 550.0 500.0 350.0 350.0 175.0 125.0

AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

9:83

DIFIC